The UK's **Biggest Selling** Amiga Magazine

OnEscapee reviewed!

CU AMIGA MAGAZINE

February 1998 £5.99 US$14.50 • IL20,500 • ASCH185 • BFR 445 • DM 28.00 • LF 490

The Ultimate Multimedia Package

SCALA MM300

- Video Effects
- Mulitmedia
- Presentations
- Interaction

On the CD-ROM:
SCALA MM300
Plus over 600Mb of software

INSIDE

Power Tower
Distant Suns
Future CPUs
Amiga Foreve

No CD-ROM?
Ask your Newsagent!

CD-Edition, disk version also available

Weird Science

NEW ADDRESS Q HOUSE, TROON WAY BUSINESS PARK,
HUMBERSTONE LANE, LEICESTER. LE4 9HA

Phone 0116 246 3800
Fax 0116 246 3801
Email sales@weirdscience.co.uk
WWW www.weirdscience.co.uk

NEW AMINET BOX SET PRICES.

AMINET SET 5

£27.99

AMINET SET 4

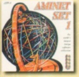
£27.99

AMINET SET 3

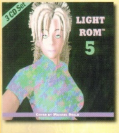
£15.99

AMINET SET 2

£15.99


AMINET SET 1

£15.99


3 CD Set
LIGHT ROM 5

LIGHT ROM 5
£29.99

LIGHT ROM 4 £19.95
LIGHT ROM GOLD £14.99
DEM ROM £9.99
JPEG TEXTURES £9.99
BACKDROPS £14.99

AMINET CDs

ALL ONLY £10.99 EACH

SUBSRIBE TO THE AMINET CD'S AND RECIEVE EACH AMINET FOR JUST £8.99. AS EACH NEW CD IS RELEASED WE WILL CHARGE YOUR CARD AND DISPATCH YOUR NEW CD ON THE DAY OF UK RELEASE. (SUBCRIPTION BY CREDIT/DEBIT CARD ONLY)

p.OS Pre-Release

Take a look at this Pre Release of p.OS and enjoy the advantages of modern operation, independance and simply forget compatibility of new operating systems - since p.OS/AMIGA runs parallel to the AMIGA-OS and still is independent and of good nature.
System Requirements:
Amiga Kickstart 2.0 (For Installation)
68020, 4Mb Free Fast RAM, Hard Drive, CD-ROM Drive

meeting pearls Vol. IV

P.OS PRE-RELEASE
£19.95

p.OS PRE-RELEASE

MEETING PEARLS 4
£4.99

GIGA GRAPHIC CDs 1-4
4-CD-SET

GIGA GRAPHICS
£9.99

GEEK GADGETS

GEEK GADGETS
£12.99

GEEK GADGETS

GEEK GADGETS 2
£12.99

AMIGA
DEVELOPER CD V1.1

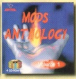
AMIGA DEVELOPERS CD
£10.99

AMIGA REPAIR KIT

AMIGA REPAIR KIT
£34.99

Magic Publisher

MAGIC PUBLISHER
£29.99


MODS ANTHOLOGY

MODS ANTHOLOGY
£22.99

Eric Schwartz Productions CD Archive

ERIC SCHWARTZ CD
£19.95

System Booster

SYSTEM BOOSTER
£9.99

EURO CD VOL. 2
£11.99

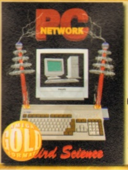
Assassins CD 3	£ 14.99
AGA Toolkit	£ 9.99
In-To-The-Net CD	£ 9.99
The Learning Curve	£ 19.95
Miami	£ 29.95
Deluxe Paint 5 CD	£ 17.99
Ultimate Blitz CD	£ 17.99
Picture Manager Pro.	£ 39.99
Personal Paint 7.1	£ 24.99
Kara Collection	£ 9.99
Personal Suite CD-ROM	£ 4.99
Personal Paint 6.4 & Manual	£ 4.99
Imagine 3D PD	£ 14.99
Blitz Basic 2.1	£ 17.99
Mini Office	£ 17.99
Games Room CD	£ 14.99
Fusion (Mac Emulator)	£ 49.99
PCX (PC Emulator)	£ 49.99
Speccy '97	£ 14.99
Retro Gold	£ 9.99
Women of the Web	£ 2.99
Card Games CD	£ 14.99
Epic Encyclopedia '97	£ 19.95
Amiga Desktop Video 2	£ 14.99
Sound Studio CD	£ 2.99
Scene Storm CD	£ 2.99
NFA Utilities Experience	£ 2.99
Magic Workbench Enhancer	£ 9.99
LSD CD 3	£ 9.99
Epic Collection 3 CD	£ 14.99
NFA AGA Experience 2	£ 2.99
NFA AGA Experience 3	£ 14.99
iBrowse (Full Version)	£ 24.99
The Hidden Truth	£ 19.95
Enc. of the Paranormal	£ 14.99
3D CD 1 Objects	£ 9.99
3D CD 2 Images	£ 9.99
UPD Gold	£ 14.99

TRADE & RETAIL DISTRIBUTORS FOR GTI, SCHATZTRUHE, CLOANTO, GRAPHIC DETAIL, INTERACTIVE, EPIC, SADENESS, PD SOFT, HISOFT, VULCAN, GUILDHALL LEISURE, AND AMIGA INTERNATIONAL.

International Distributor:

SCHATZTRUHE

G.T.I.



NETWORK PC

Access all of the PC Drives.
Read & Write to the PC.
Load files directly from the PC.
Up to 49k/sec for Amiga > PC.
Up to 29k/sec for PC > Amiga.
Easy Installation for Amiga & PC.
Requires WB2.04+ & Windows 95.

THE DEFINITIVE AMIGA TO PC LINKUP SYSTEM JUST GOT BETTER

NEW COMPANION CD-ROM NOW INCLUDED

Network PC includes a 3m Cable, Installation disks for both computers, detailed manual and a companion CD-ROM. The CD contains utilities for the Amiga & PC and the Amiga Emulator for Windows 95 with games & demo files.

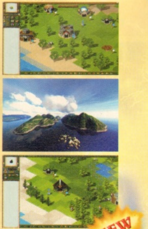
£17.99

Fontamania!

Contents
1919 Adobe
767 Bitmap
228 Calamus
1105 CG Fonts
244 Coloured
300 GDos
175 Iff Pics
918 Intellifont
139 Pagestream
173 ProDraw
1658 Ps Fonts
1477 True Type
1562 Type 1

Fontamania **£9.99**

FOUNDATION



NEW **£29.99**

ONESCAPEE

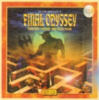
NEW **£29.99**

GENETIC SPECIES

NEW **£29.99**

uropa²

NEW **£29.99**



FINAL ODYSSEY

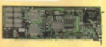
Theseus Verses The Minotaur

NEW **£29.99**

HARDWARE

BLIZZARD 1230-50 £94.99
BLIZZARD 1260-50 £299.99
CYBERSTORM MK.III £349.99

CYBERSTORM PPC 200 MHz WITH 68060-50 £849.99



PICASSO IV GFX CARD £249.99

CLASSIC Squirrel
The SCSI Interface for your Amiga 600/1200

Six Speed CD-ROM & Squirrel £159.99
Eight Speed CD-ROM & Squirrel £169.99
A1200 4 Meg Ram Expansion £49.99
ProMidi Amiga Midi Interface £24.99
Squirrel SCSI £54.99 Surf Squirrel £89.99
560 dpi 3 Button Amiga Mouse £10.99
2 Button Mouse £8.99 CD32 Joypad £7.99
Competition Pro Amiga Joypad £16.99
Buffered 4 Way IDE Interface £34.99
External Amiga Floppy Drive £39.99
External 33.6 Fax Modem £74.99

INFINITIV AMIGA

Amiga 1300 £349.99
Amiga 1400 £469.99
Amiga 1500 £599.99

Infinitiv Tower Systems
Tower Kit £159.99
Zorro 2 £149.99
Zorro 3 £319.99
3.5" Bay £11.99
5.25" Bay £29.99
Keyboard Case £39.99
HD Floppy Drive £59.99
PCMCIA Adp. £29.99
Video Slot Interface £39.99

GAMES

NEW GAMES
Myst CD £ 29.99
Street Racer CD £ 12.99
Theme Park CD £ 12.99
Trapped 2 £ 19.99
Wendetta £ 16.99
Strangers CD £ 19.99
Big Red Adv. £ 19.99
Civilisation CD £ 14.99
Gamers Delight £ 16.99
Grand Slam Gamers Gold £ 8.99

Lemmings	£ 12.99
Cannon Fodder 1 or 2	£ 8.99
Dog Fight	£ 8.99
Player Manager 2	£ 8.99
Dune II	£ 12.99
Railroad Tycoon	£ 12.99
Overlord	£ 12.99
Enemy	£ 14.99
Arcade Action	£ 12.99
Acid Attack	£ 12.99
Burnout AGA	£ 16.99
Bograts	£ 12.99
Breathless AGA	£ 12.99
Colossus Chess	£ 4.99
Desert Strike	£ 8.99
Extreme Racing AGA	£ 8.99
F15 Strike Eagle II	£ 12.99
F19 Stealth Fighter	£ 12.99
F17a Nighthawk	£ 8.99
Gloom	£ 4.99
Microprose Grand Prix	£ 12.99
Formula 1 Masters	£ 19.99
Hillsea Lido	£ 12.99
Hugo	£ 24.99
Impossible Mission 2025	£ 8.99
Jet Pilot	£ 16.99
Civilisation	£ 12.99
Manyk Mayhem	£ 12.99
Mega Typhoon	£ 19.99
Minskies	£ 8.99
Pinball Fantasies AGA	£ 12.99
Road Kill	£ 4.99
Road Rash	£ 8.99
Slamtilt AGA	£ 18.99
Spherical Worlds	£ 8.99
Super Skidmarks	£ 8.99
Testament	£ 16.99
Theme Park AGA	£ 12.99
Tile Move	£ 12.99
Time Keepers	£ 12.99
Time Keepers Exp. Disk	£ 4.99
Tin Toy Adventure AGA	£ 24.99
Tiny Troops	£ 16.99
Tommy Gun	£ 19.99
UFO	£ 12.99
Valhalla 1	£ 14.99
Valhalla 2	£ 14.99
Valhalla 3	£ 14.99
Virtual Karting AGA	£ 8.99
Watch Tower	£ 12.99
XP-8	£ 8.99
Zeewolf 2	£ 2.99

TELEPHONE ORDER HOTLINE
0116 246 3800

UK POSTAGE IS £1.00 FOR THE FIRST ITEM AND 50p EACH EXTRA ITEM, OVERSEAS IS DOUBLE.

WE WILL PRICE MATCH ANY ADVERT IN THIS MAGAZINE

CU AMIGA MAGAZINE

FEBRUARY 1998 • CONTENTS

Editorial

EDITOR	Tony Horgan
STAFF WRITER	Andrew Korn
PRODUCTION EDITOR	Russell Cox
CD-ROM COMPILER	Neil Bothwick
TECHNICAL CONSULTANT	John Kennedy
DESIGN	Jenny Abrook, Alicia Heany
CONTRIBUTORS	Jason Compton, Dave Stroud, Larry Hickmott, Jason Hulance, Dhomas Trenn, Steve Bye, Simon Archer, Mat Bettinson, John Brooker
PHOTOGRAPHY	Ben Jennings
SCITEX MANAGER	Sarah Best
SYSTEMS MANAGER	Sarah-Jane Leavey

Advertising, Marketing & Management

PUBLISHER	Andy McVittie
ADVERTISING MANAGER	Marianna Masters
PRODUCT MANAGER	Kirstin Ritchens
MARKETING EXECUTIVE	Zoe Wharnsby
PRODUCTION MANAGER	Sam Lee
AD PRODUCTION MANAGER	Emma Minford
AD PRODUCTION EXECUTIVE	Natasha George
ADVERTISING ASSISTANT	Annabel Green
FACILITIES MANAGER	Robert McBride

CU Amiga Magazine
37-39 MILLHARBOUR, ISLE OF DOGS,
LONDON E14 9TZ, UNITED KINGDOM
0171 972 6700
GENERAL@CU-AMIGA.CO.UK
WEB SITE: www.cu-amiga.co.uk
SUBS ENQUIRIES: 01858 435350
ADVERTISING PRODUCTION FAX: 0171 972 6755

Contacts

READERS' LETTERS AND TECHNICAL PROBLEMS: For general, non-technical, enquiries send your letters to the address above clearly marked for **BACKCHAT**. For technical problems send them clearly marked **Q&A**. Because of the nature of many enquiries they cannot be answered by phone. You can E-mail us at **backchat@cu-amiga.co.uk or Q+A@cu-amiga.co.uk.**

PD REVIEWS: We get hundreds of new PD programs every week, but we're still hungry for more. If you've written a PD program that you're proud of send it to: **PD SUBMISSIONS, CU Amiga Magazine, 37-39 Millharbour, Isle of Dogs, London, E14 9TZ.**

ADVERTISING OR ADVERTISING PROBLEMS: If you wish to advertise in CU Amiga Magazine, please contact **Marianna Masters** on the above telephone number and address. Contact **Annabel Green** if you have a query regarding any advertisement in CU Amiga Magazine.

COVER DISK PROBLEMS: If you have a faulty cover disk then write or return your disk to our duplicators: **DISKXPRESS, 7 WILLOW COURT, BOURTON INDUSTRIAL PARK, BOURTON-ON-THE-WATER, GLOUCESTERSHIRE GL54 2HQ. TEL: 01451 810788.**

COMPETITIONS: CU Amiga Magazine often runs competitions. To enter one of these simply put your name and address on the back of postcard, along with the answers and send them to us at the usual address (unless otherwise stated in the competition). Competition entries are only accepted by post. One entry per person please and the editor's decision is final. Winners will be notified by post. Other rules may be printed from time to time.

BACK ISSUES: 01858 435 350. Subject to availability. DD disk issues: UK price £5.99 (inc P&P). Rest of world £6.50. CD-ROM issues: UK price £6.99, Europe and Rest of world £7.50.

SUBSCRIPTION DETAILS: Subscriptions are available from Tower Publishing, Tower House, Sovereign Park, Lathkill Street, Market Harborough LE16 9EF Tel: 01858 435 350 . Annual subscription rates (inc postage) 12 issues: UK/BFPO £54. SURFACE MAIL ROW & EUROPE: £60.00. AIRMAIL EUROPE £70.00. ROW AIRMAIL £90. See subs page for special offers.

© EMAP Images 1997. No part of this magazine may be reproduced in any form, either electronic or mechanical, or sold without the express written permission of the publisher. Cover disks remain the copyright of their respective suppliers and may not be duplicated, distributed or sold on without their permission. All material and prices are believed to be accurate at the time of going to press. CU Amiga Magazine attempts to maintain the highest standards, but cannot be held responsible for any errors, factual or otherwise which may have inadvertently crept into the issue. None of the reviews or previews in any section of this magazine constitute paid for or otherwise solicited advertisements for that product or supplier. CU Amiga Magazine is an independent publication and the opinions expressed by its reviewers are their own, free of any outside encumbrance.

PRINTED IN THE UNITED KINGDOM BY SOUTHERN PRINT WEB OFFSET, POOLE.
COVER DISK AND CD-ROM DUPLICATION BY DISKXPRESS

ABC January-June 1997 27,391

emap. images

Editorial

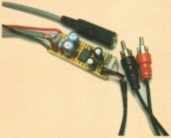
The first new issue of 1998 sees a couple of previously mythical games turning up in impressively complete and final form: both Myst and OnEscapee have been entertaining us this month, and turning more than a few heads among our console-obsessed workmates we share our offices with. It's satisfying proof that the Amiga scene is well and truly back in business, this time driven by people who really care about it. It's also been encouraging to see the flood of responses we've had from our reader survey in the last issue and on the web site. We'll be bringing you the results as soon as we can collate them. Now go and enjoy the mag!

Tony Horgan, Editor

DIY Scene

22 CDDA Mixer

This month's DIY project is of use to anyone who has a CD drive. Most Amigas don't have the CD audio connection going anywhere useful, if it's connected to anything at all. Simon 'portable Amiga' Archer shows us how to combine the CDDA output of a standard CD-ROM drive with the Amiga's audio output, feeding into a single stereo signal that can be piped directly to your chosen amplification system. It's cheap, quick, and really quite easy too!



Feature

28 The Big Switch

We can't go on like this. The 680x0 line of CPUs has come to a dead end, and the Amiga is in need of a new engine. We already have the bolt-on PowerPC options from phase 5, but that's not an official Amiga line as yet. Does that mean we'll all be using PowerPC in future, or will Amiga Inc decide to change tack and go for a Pentium or DEC Alpha chip at the heart of a new machine? We take a close look at the current situation of CPUs, their manufacturers and their users, and ask, where next for the Amiga?

PowerPC
MPC603e
THOMSON-CSF
SEMICONDUCTEURS SPECIFIQUES
9721
TSPC603EVAU3L

Feature

32 The Big Switch

CU Amiga looks at a bit of PC software! No, we haven't gone mad or lost our marbles, it's the new official Amiga emulator for the PC from Cloanto, the PPaint people. Does this spell the end for the Amiga or is it a valuable lifeline? We take a look at it and canvas a few opinions from the Amiga scene to find out whether it's going to see the end of Amiga hardware as we know it, or be confined to little more than a curiosity by PC users.

News

16 All the latest developments on the Amiga scene, plus Stateside.

Games......36

Reviews:
- **36** Game Italia
- **38** OnEscapee
- **42** Myst
- **46** Final Odyssey
- **49** Sword
- **50** Tips Central
- **51** Adventure Helpline

Tech Scene......52

- **52** Distant Suns CD
- **55** Apple II Emulator
- **55** Atari 800 Emulator
- **58** Power Tower
- **61** Input Devices
- **64** Blitz Basix CD
- **66** PD Scene
- **68** PD Utilities
- **72** Art Gallery

Workshop......75

- **76** Personal Paint 6.6
- **80** Amiga C Programming
- **83** Back Issues
- **82** Wired World
- **84** Net God
- **85** Surf of the Month
- **86** Wired World
- **88** Sound Lab
- **90** Desktop Publishing
- **95** Next Month
- **95** User Groups
- **96** Q&A and A to Z
- **100** Backchat
- **103** Subscriptions
- **104** Points of View
- **106** Techno Tragedies

Cloanto PPaint
2: (1/52)
ABCD EFG
get CONNECTED v2
BEGINNING
Final Odyssey

Personal Paint 6.6 76

Final Odyssey 46

Desktop Publishing 90

Power Tower 58

OnEscapee 38

Cover disks

18 Scala MM300

The ultimate multimedia package comes your way on this month's cover disks and CD. CD-ROM users get a load of support files too. Find out just how powerful and versatile the system really is, starting on page 18.

CD
AMIGA
MAGAZINE
February 1998 – packed with the best demos, graphics, mods, web sites, games and utilities for your Amiga, plus Scala MM300
■ Amiga ■ CD32
See magazine for what's available and how to use the CD
Super
CD-ROM 19

14 Super CD-ROM 19

This month's CD continues the trend of over 600Mb of the best Amiga software you can lay your hands on. As well as the full Scala system there's all kinds of tools, mods, graphics and demos to keep you entertained over the coming weeks. Threre's also a good healthy collection of web sites for you to browse without running up a penny on your phone bill!

AMIGA
DISK 174
SCALA
MM300
FULL
It's what your Amiga was made for!
AMIGA
DISK 175
SWORD
Playable demo!
Try out the latest platform-based romp for yourself!
Plus!
Scala Extras
AMIGA

A5000

Welcome to a brand new Amiga compatible computer, designed and built by DCE Germany and world-wide distribution by Power Computing Ltd -UK.

This computer represents the first real attempt from anyone, since Commodore's bankruptcy, to launch new models which are both, compatible with the previous AGA machines and upgradable to the latest technology including PowerPC's.

Unlike other products, the Power A5000 (and the A6000 even more so) are based on genuine, newly designed motherboards, which, in order to avoid incompatibility with Zorro bus, are based on the A1200 design (A4000 for the A6000), improving even further the original idea.

COMING SOON FROM

POWER COMPUTING LTD
Unit 82A, Singer way
Woburn Road Ind. Estate
Kempston
Bedford MK42 7PU
England

Tel: +44 (0)1234 851500
Fax: +44 (0)1234 855400
Email: sales@powerc.co.uk
URL: http://www.powerc.com

- AGA Chipset
- Processor details available soon
- Kickstart 3.01 operating system
- 2MB Chip RAM on-board
- Up to 64MB of Fast RAM
- 880K floppy drive (1.76MB opt.)
- 1.7GB Hard Disk
- 10x or 24x CD-ROM Drive
- Four Zorro II sockets
- Scan Doubler on-board
- Two IDE sockets
- MPEG Level 1 supported
- Mini Tower Case

THE POWER A6000 AVAILABLE SPRING '98

Storage Devices

All prices include VAT

FLOPPY DISK DRIVES

- All drives come with Floppy Expander

A500 INTERNAL DRIVE	£24.95
A600/A1200 INTERNAL DRIVE	£24.95
A2000 INTERNAL DRIVE	£34.95
PC880E EXTERNAL DRIVE	£39.95
XL 1.76MB EXTERNAL DRIVE	£65.95
XL 1.76MB INT. DRIVE A4000	£60.95

iOMEGA ZIP DRIVE

- Inc. cable and Zip tools cartridge

ZIP DRIVE 100MB SCSI*	£135.95
ZIP DRIVE INCLUDING SQUIRREL	£169.95
100MB ZIP CARTRIDGE	£15.95

*REQUIRES SQUIRREL SCSI INTERFACE

Modem Bundles

MODEM ONE BUNDLE

- 33.6BPS Modem and cables
- Net and Web software
- IBrowse software
- One month free with Demon internet

MODEM BUNDLE ONE	£89.95

MODEM TWO BUNDLE

- 33.6BPS Modem and cables
- Net and Web software
- IBrowse software
- One month free with Demon internet
- Whippet fast serial interface A600/1200

MODEM BUNDLE TWO	£109.95

MODEM THREE BUNDLE

- 33.6BPS Modem and cables
- Net and Web software
- IBrowse software
- One month free with Demon internet
- Surf squirrel SCSI-2 serial interface for A1200 PCMCIA connection

MODEM BUNDLE THREE	£159.95

GVP PRODUCTS

NEW LOW PRICES

GVP HC-8 SCSI INTERFACE	£99.95
GVP GURU ROM V6 NEW REVISION	£49.95
GVP DSS-8 SOUND SAMPLER	£59.95
GVP 4MB RAM MODULE	£59.95
GVP 16MB RAM MODULE	£99.95
GVP A1200 SCSI INTERFACE	£59.95
FOR ALL A1200 ACCELERATOR CARDS	

MISCELLENOUS

POWERTAB - GRAPHIC TABLET	£159.95
ZIP RAM STATIC COLUMN PER MB	£16.95
BREATHLESS 3D GAME	£15.95
BIG RED ADVENTURE CD-ROM	£19.95
HEAVY DUTY PSU 200 WATT	£69.95
OFFICIAL AMIGA MOUSE MAT	£9.95

BEWARE OF NONE CE PSU'S

"The Rolls Royce of PSU's"
AMIGA FORMAT

JOYPAD OFFER

- Joypad, for use with many games

GAMES JOYPAD	£14.95

HARD DRIVES

- All hard drives inc. cable and software

QUANTUM FIREBALL 3.5" 1.6GB	£159.95
QUANTUM FIREBALL 3.5" 2.1GB	£179.95
QUANTUM FIREBALL 3.5" 3.2GB	£199.95
1.3GB A1200 INTERNAL	£129.95
2GB A1200 INTERNAL	£159.95
STACK CABLE FOR THE ABOVE	£12.95

VIDEO BACKUP DEVICE

£20.00

- Backup 520MB onto a 4HR VHS tape

VIDEO BACKUP - PHONO	£20.00
VIDEO BACKUP - SCART	£20.00

AWARD WINNING BACKUP DEVICE

Graphic Cards

CYBERVISION 64-3D CARD

- Hi-res 64-bit graphic card
- 4MB of display memory
- For the A2000/3000(T)/4000(T)

CYBERVISION 64-3D CARD	£159.95
SCANDOUBLER CYBERVISION	£69.95

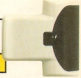
Amiga Scanners

FLATBED SCANNERS

- Epson A4 Flatbed Scanner
- 24-bit colour scanning
- Greyscale and line art modes
- OCR software available at £20

EPSON GT-5000 SCANNER	£219.95
EPSON GT-5000 + SOFTWARE	£249.95

HAND SCANNERS



£59.95

- Includes interface and OCR software
- Colour scanner is AGA 24-bit/400DPI

POWERSCAN BLACK & WHITE	£59.95
POWERSCAN COLOUR	£99.95

Epson Printers

EPSON STYLUS PRINTERS

£45.95

TURBO PRINT
TURBO PRINT 5

- Includes Turbo Print LE and cable

EPSON 600 A4 1440DPI COLOUR	£239.95
EPSON 800 A4 1440DPI COLOUR	£259.95
TURBO PRINT 5 FULL VERSION	£45.95

POWER DIGITAL CAMERA

- Digital camera, ideal for web page photos

POWER DIGITAL CAMERA	£99.95

CATWEASEL MK2

£49.95

- A4000/1200 high density drive controller
- Allows you to connect any PC Drive

ORIGINAL A4000 KEYBOARD/INTERFACE £40

VISA

01234 851500

FAX 01234 855400

UNIT 82A SINGER WAY
KEMPSTON MK42 7PU

Visit our web site www.powerc.com

POWER
COMPUTING LTD

A1200 Accelerators Cards

WORDWORTH £19 WITH ANY BOARD OFFICE 6 CD-ROM

VIPER MKII 40MHZ 030

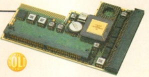
- 68030 EC 40MHZ (NOT MMU)
- Optional 2nd SIMM socket upto 64MB
- PCMCIA Friendly, Inc. Clock. Optional FPU

VIPER MKII 40MHZ 0MB	£89.95
VIPER MKII 40MHZ 4MB	£99.95
VIPER MKII 40MHZ 8MB	£119.95
VIPER MKII 40MHZ 16MB	£159.95
VIPER MKII 40MHZ 32MB	£234.95
VIPER MKII 40MHZ 64MB	£309.95
OPTIONAL SIMM SOCKET	£15.00

turbo 1230LC

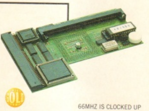
BLIZZARD 1230 MKIV

68030 BARE 50MHZ	£95.95
68030 8MB RAM	£114.95
68030 16MB RAM	£134.95
68030 32MB RAM	£169.95



APOLLO 68040 BOARD

APOLLO 1240 25MHZ	£129.95
APOLLO 1240 33MHZ	£149.95
APOLLO 1240 40MHZ	£189.95



APOLLO 68060 BOARD

APOLLO 1260 50MHZ	£269.95
APOLLO 1260 66MHZ	£319.95

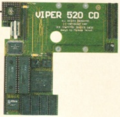
66MHZ IS CLOCKED UP

A500 Accelerator Card

NEW VIPER 520CD

- 68020EC 33MHZ Without MMU
- PGA FPU Socket 33MHZ Only
- Space for IDE 2.5" Hard Drive
- 2 x 40-Pin CD-ROM/HD Socket
- 8MB RAM On-board
- 3.0 ROM Including software
- Fat Agnus slot free to fit mini mega chip

VIPER 520CD	£99.95



A3000/4000(T) Accelerator

CYBERSTORM POWERPC

- 604e PowerBoard without 68K CPU.
- Ultra Wide SCSI-3, Includes MMU/FPU

180MHZ PPC NO CPU	£519.95
200MHZ PPC NO CPU	£615.95
180MHZ PPC 68040-25MHZ CPU	£559.95
180MHZ PPC 68060-50MHZ CPU	£745.95
200MHZ PPC 68040-25MHZ CPU	£649.95
200MHZ PPC 68060-50MHZ CPU	£849.95

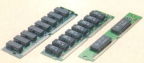
CYBERSTORM PPC

NEW! PPC ACCELERATOR

MEMORY SIMMS

- High quality memory SIMMS

4MB 72-PIN SIMM	£9.95
8MB 72-PIN SIMM	£19.95
16MB 72-PIN SIMM	£39.95
32MB 72-PIN SIMM	£74.95

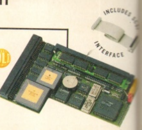


www.powerc.com

VIPER MKV BOARD

- 68030 50MHZ Accelerator
- SCSI-II Interface on-board
- Support upto 256MB of RAM
- Optional FPU

VIPER MKV 1230 0MB	£139.95
VIPER MKV 1230 8MB	£158.95



BLIZZARD 603 PPC

- 603e PowerPC without 68K CPU.

160MHZ PPC NO CPU	£279.95
200MHZ PPC NO CPU	£369.95
250MHZ PPC NO CPU	£430.95
160MHZ PPC 68030-50MHZ CPU	£309.95
200MHZ PPC 68030-50MHZ CPU	£399.95
250MHZ PPC 68030-50MHZ CPU	£469.95

POWER UP

AMIGA™ GOES POWERPC™

BLIZZARD 603+ PPC

- 603e+ PowerPC without 68K CPU.

160MHZ PPC NO CPU	£279.95
200MHZ PPC NO CPU	£369.95
250MHZ PPC NO CPU	£430.95
160MHZ PPC 68040-25MHZ CPU	£319.95
160MHZ PPC 68060-50MHZ CPU	£499.95
200MHZ PPC 68040-25MHZ CPU	£405.95
200MHZ PPC 68060-50MHZ CPU	£589.95
250MHZ PPC 68040-25MHZ CPU	£479.95
250MHZ PPC 68060-50MHZ CPU	£659.95

BLIZZARD 1260 MKV

68060 BARE 50MHZ	£319.95
68060 8MB RAM	£338.95
68060 16MB RAM	£358.95
68060 32MB RAM	£458.95

INCLUDING SCSI INTERFACE

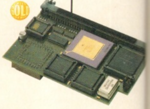
**50MHZ FPU WHEN PURCHASED
WITH THE BLIZZARD ONLY £29
40MHZ FPU ONLY £20**

A600 Accelerator Card

NEW VIPER 630

- A600 Accelerator Card
- 68030 33MHZ Processor
- Up to 32MB RAM (1 x SIMM)
- FPU Included, PCMCIA Compatible

A600 0MB 33MHZ	£75.95
A600 4MB 33MHZ	£85.95
A600 8MB 33MHZ	£95.95
A600 16MB 33MHZ	£115.95
A600 32MB 33MHZ	£150.95



A1500/2000 Accelerator

BLIZZARD 2604 PPC

- 604e PowerPC without 68K CPU.

180MHZ PPC NO CPU	£549.95
200MHZ PPC NO CPU	£639.95
180MHZ PPC 68040-25MHZ CPU	£579.95
180MHZ PPC 68060-50MHZ CPU	£769.95
200MHZ PPC 68040-25MHZ CPU	£679.95
200MHZ PPC 68060-50MHZ CPU	£869.95

BLIZZARD 2604e PowerBoard

Power Special Offer

**SPECIAL FPU PRICES WHEN PURCHASED
WITH ANY ACCELERATOR CARD**

20MHZ £10 (PLCC) 33MHZ £15 (PLCC) 40MHZ (PGA) £20 50MHZ £29 (PGA)

INCLUDES SCSI INTERFACE

UP+
ER PC™

MKV
.£319.95
.£338.95
.£358.95
.£458.95

CHASED
ILY £29
£20

ED

29 (PGA)

Amiga CD-ROM External Drives

ACCELERATOR/CD BUNDLE

- External CD-ROM Drive
- Oscars and Diggers CD-ROM
- Chaos Engine CD-ROM
- WordWorth CD-ROM
- SCSI Interface
- Viper MKV or Blizzard Card OMB

VIPER BUNDLE

- Spec as above

2X CD-ROM	£189.95
6X CD-ROM	£249.95
8X CD-ROM	£269.95
12X CD-ROM	£319.95

BLIZZARD BUNDLE

- Spec as above

2X CD-ROM	£219.95
6X CD-ROM	£269.95
8X CD-ROM	£289.95
12X CD-ROM	£339.95

NEW CD-ROM BUNDLE

- External CD-ROM Drive
- Squirrel Interface
- Oscars and Diggers CD-ROM
- Chaos Engine CD-ROM

Special Offer

2x Speed CD-ROM

SLIMLINE DRIVE

CD-ROM Drive includes:
Squirrel Interface
External PSU
Choas Engine CD-ROM
Oscar/Diggers CD-ROM

£79.95

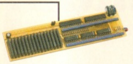
6X CD-ROM	£139.95
8X CD-ROM	£155.95
12X CD-ROM	£169.95

Amiga Memory Cards

CDTV 2MB RAM CARD

- Inc. 2MB Zero Wait State Fast-RAM
- Auto-Recharge Battery Real-time clock
- Fits easily into the CPU 68000 socket
- Fully auto-configuring Fast-RAM
- Increases the speed of your Amiga CDTV

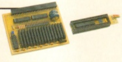
CDTV 2MB RAM £49.95



A500 2MB RAM CARD

- Factory installed 2MByte RAM
- Auto-Recharge Battery Real-time clock
- Fully auto-configuring RAM
- Works with all A500's WB1.3 and above

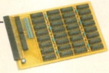
A500 2MB RAM £49.95



A500+ 1MB CHIP RAM

- Inc. 1MByte Chip RAM
- Fits into the trapdoor on your Amiga 500+
- Fully auto-configuring Chip-RAM
- Works with all A500+ computers

1MB CHIP RAM £19.95



MINI-MEGA CHIP

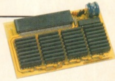
- 1MB CHIP RAM

1MB CHIP RAM £99.95

A600 1MB CHIP RAM

- Inc. 1MByte Chip RAM
- Auto-Recharge Battery Real-time clock
- Fits into the trapdoor on your Amiga 600
- Fully auto-configuring Chip-RAM
- Works with all A600 and A600HD

1MB CHIP RAM £24.95

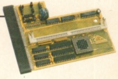


A1200 0 - 8MB RAM

- MByte 32-bit Zero Wait State Fast-RAM
- Auto-Recharge Battery Real-time clock
- Socket for PGA FPU 68882 up to 50Mhz
- Fully auto-configuring Fast-RAM
- Fits easily into the A1200 trapdoor
- 4MB PCMCIA compatible only (Not 8MB)

4MB RAM	£45.95
8MB RAM	£55.95

ADD £15 FOR 40MHZ FPU. ONLY WITH RAM

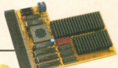


A1200 4MB RAM CARD

- 4MB Only, not upgradable

4MB RAM £39.95

ADD £15 FOR 40MHZ FPU. ONLY WITH RAM



ScanDoubler

SCANDOUBLER

- Scandoubler, external for all Amigas
- AGA Mode full 16-million colours
- Scandoubler mode 15MHZ 16-bit 64K col.
- Supports interlace and non-interlace
- Works on any VGA monitor

SCANDOUBLER	£79.95
VGA ADAPTOR	£15

£15

PHONE ORDERS We accept most major credit cards and are happy to help you with any queries. **CHEQUES/POSTAL ORDERS** Ordering by cheque/PO please make payable to **POWER COMPUTING LTD** and specify which delivery is required. **WARRANTY** All Power products come with a 12 month warranty unless otherwise specified. **TECHNICAL SUPPORT** Help is on hand with a full Technical Backup service which is provided for Power customers. **MAIL ORDER PRICES** All prices listed are for the month of publication only, call to confirm prices before ordering. **EXPORT ORDERS** Most items are available at Tax Free Prices to non-EC residents. Call to confirm prices. BFPO orders welcome. **MAIL ORDER TERMS** All prices include VAT. Specifications and prices are subject to change without notice. All trademarks are acknowledged. All orders in writing or by telephone will be accepted only subject to our terms and conditions of trade, copies of which are available on request. Please allow up to 7 days for cheques to clear before despatching of the goods.

VISA

01234 851500

FAX 01234 855400

UNIT 82A SINGER WAY KEMPSTON MK42 7PU

POWER
COMPUTING LTD

2-3 DAYS £5.00 ☐ NEXT DAY £8 ☐ SAT £15 ☐ SUBJECT TO PRODUCT AVAILABILITY

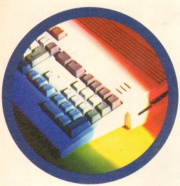
NAME ____________ ADDRESS ____________

POSTCODE ____________ TEL NO. ____________

ITEMS ____________

TOTAL (INC. DELIVERY) £ ____________ CREDIT CARD NO. ____________

EXPIRY ISSUE NO. ____________ SIGNATURE ____________



News

Amiga Quakes!

▲ Bloody great monsters heading your way courtesy of id Software and ClickBoom!

S After months of rumours, it has happened - the Amiga has Quake. id Soft's legendary super Doom clone first appeared on the Amiga in early 1997 in the form of the Amiquake hack, an unofficial port which was made by a small group of Amiga coders after the source code to the game found it's way onto a cracker's bulletin board and made it's way around the internet. Back then legal threats from id Software stopped Amiquake pretty fast, but after months of negotiation, Canadian softco ClickBoom have acquired a license to sell the Amiga version commercially.

It is ironic that Clickboom acquired the rights to Quake after a small group of hackers was able to prove to the original software house that the Amiga was capable of running the software, as this is a very similar story to the one that lead to the publication of Amiga Myst, also by ClickBoom.

Quake, second choice amongst Amiga users responding to the ClickBoom wishlist. It is currently about the most popular and well known game on any computing system, and by getting an conversion for the Amiga is something of a coup. Currently, Quake only runs on the Sega Saturn, the PC and the Macintosh. Versions for the Nintendo 64 and Playstation are on again off again affairs that have been long awaited but still appear a way off; by contrast the Amiga version is already almost complete.

The Amiga version of Quake has all the features of the PC version. It should be possible to use a wide range of Quake add-ons, and network access has also been promised. Indeed we can expect to see Quake "clans" of Amiga users turning up on the internet based multi user Quakeworlds.

We'll have to wait and see how well the final version of Quake runs on the Amiga before we can tell you exactly how fast it will run on your system, but from what we have seen, it's going to be pretty good. Keeping in low resolution, it should be playable on an AGA machine with a 68040 or better accelerator, although clearly the better the processor the better it will run. We'll have to wait for the PowerPC version to see Quake running at its best, however.

A Quake demo was shown running on a PowerPC by Haage and Partner in Cologne, and it run at an impressive speed indeed. We have yet to have confirmation of this, but it seems likely that Clickboom will also be supporting the Permedia 2 based Cybervision and BlizzardvisionPPC graphics add-on cards. Quake is noted for using the OpenGL 3D graphics API, which is directly supported on the phase5 cards by the CyberGL implementation of the OpenGL standard. A 68060 Amiga with a graphics card will run runs Quake rather nicely, a PPC Amiga with the 3D card will be something to behold.

▲ The way I feel after doing the latest issue of CU...

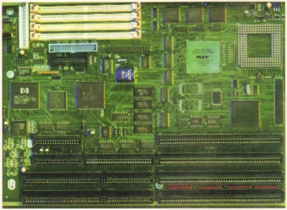
BoXeR Shows Us What It's Made Of

The specifications of the new BoXeR motherboard form Index Information have been announced. Based on the Amiga O.S. and chipset, the BoXeR is 100 per cent Amiga compatible and will allow systems within the price range of existing A1200s and A4000s to be built. The Baby AT motherboard will fit in any standard PC desktop or tower case, and carries 2Mb of Chip RAM, 4 72-pin SIMM sockets and a real-time clock. Also on the board are headers for printer, RGB video, AV, serial, audio, joystick and mouse. The specifications of Index's board, which will be distributed by Blittersoft, are looking very impressive. Here's a quick run-down:

- **Supports Motorola 68040 or 68060 at 25-75Mhz**
- **4x 72-pin SIMM sockets allow up to 2Gb Fast RAM**
- **2Mb, 32-bit wide Flash ROM providing Kickstart ROMs and resident modules, as well as allowing software and hardware updates.**
- **CD-ROM audio input connector and mixer**
- **Standard keyboard DIN connector allowing the use of PC or Amiga keyboards, with auto-detection.**
- **High-speed Chip memory read/write technology boosting memory access by up to 30 percent.**
- **Connector for processor upgrades, such as a PowerPC card - little more than a PPC chip on a card.**
- **16-bit ISA slots supporting low-cost peripherals, for example modems, ethernet and sound cards.**
- **CD-ROM filesystem in ROM, allowing booting straight from CDs.**

The BoXeR will be sold in three ways: As the heart of new "Black Box" Amiga systems from Blittersoft; as a standalone motherboard and through OEMs (Originating Equipment Manufacturers).

Prices have not yet been announced, but are expected to rival existing mid-range systems. It is yet to be seen how the board performs in reality, but we hope to test a pre-production model in the next issue. For more information, check out Blittersoft's website: Http://www.blittersoft.com.



POV Raytracer V3 Out, PPC Coming Soon

Persistence of Vision, the multi-platform public domain rendering software, has been updated. Persistence of Vision is a public domain raytracing program for several platforms, including the Amiga. Joel Newkirk, one of the Amiga programmers, has released the latest incarnation, version 3.02.

What Persistence of Vision lacks is a GUI: you have to stage your 3D scene by hand, although several helpful examples are included and if you're good with graph paper, it's a manageable task. What POV has in abundance are algorithmic textures to make your objects visually appealing—with so many authors working on the project, they've amassed quite a lot, to rival the included Imagine textures.

Newkirk also promises support for the Phase5 PowerUP cards in the near future, allowing much faster rendering times. There are presently versions available for all Amigas, even those without FPU units. To learn more about POV-Ray, check out www.wearefamily.com/newkirk.

Persistence of Vision
AMIGA®

Gamesmith Returns

Following the conclusion of US game developer Bithead Technologies' distribution contract with Oregon Research, they have decided to return to direct sales of their GameSmith game development system for the Amiga.

GameSmith is a set of tools which integrate with any Amiga C or assembly compiler to keep programmers from having to "reinvent the wheel" every time they sit down to code up a game, containing a number of useful routines commonly used in games programming. Bithead can be reached by phone on +1 719 683 5681 or e-mail (johne@webaccess.net).

News in Brief

56k modems to drop in price

A report by ARS (Associated Research Services) predicts that costs of 56k modems will plummet following an agreement for a 56k standard reached on December 4. The meeting of the Industry Association in Orlando, Florida agreed to the need for a common standard because some ISPs only support either K56flex or x2 technology, and modem sales have suffered as a result. A preliminary standard for 56k is likely to be decided in January at a meeting of the International Telecommunications Union.

RC5 goes PPC

The PowerPC version of the Amiga RC-64 client is now available, boosting performance over the 68k version by a substantial margin. By utilising the PowerPC, the Amiga RC5-64 team hopes to improve on its position in the rankings - currently 7th out of 12,000 competing teams. To get your hands on the new PPC client, or to join in the RSA secret key challenge, visit the Amiga RC5 Team Effort homepage at: Http://www.cistron.nl/~ttavoly/rc5

User Group Network formed

Amiga Inc. and Amiga.org have announced the formation of the Amiga User Group Network, or "UGN" for short.

The internet-based system will act as a central point for news originating from Amiga, Inc. and will be broadcast to all of the network's members by e-mail.

To join the UGN, visit: Http://www.amiga.org/usergroups and fill in the provided form. More information can also be found at that site.

A4000 Towers at Knock-Down Prices

White Knight are now distributing low-cost A4000T systems in various configurations.

Available with or without processor, hard disk or memory, White Knight believe they provide "maximum flexibility at the lowest cost."

The basic A4000T is available for £1049 inclusive of VAT, and can be configured with a Cyberstorm Mk3 or PPC accelerator.

White Knight, the UK's largest supplier of PowerUp cards, can be contacted on (01920) 822 321.

News in Brief

Randomize Amiga Products

Amiga International has licensed Randomize to produce a range of Amiga promotional items. Starting with a selection of T-shirts sporting the Amiga logo and "Powered by Amiga" slogan, the company hopes to build up a range of products to promote your favourite machine.

For more information on current and forthcoming products, visit the Randomize website at Http://www.randomize.com

Want an Oxypatcher?

Oxypatcher will shortly be available in the UK from Weird Science, and is expected to retail for £14.95. If you're running an '040 or '060 system, and you aren't utilising a Phase5 accelerator card with CyberPatcher software, call Weird Science now on (01162) 463800 to order your copy!

Ultra Cheap CD ROMs

Power Computing and Wizard Developments both have cheap PCMCIA CD-ROM drives on offer. Power's is a two speed external SCSI CD-ROM drive with case, power supply and a Squirrel Interface, and is selling for a bargain £79.95. Wizard Development's £80 CD-ROM drive is the Amiga Technologies Q-Drive, a 4 speed unit which also connects to the PCMCIA unit. Wizard only have a small number of these left, so snap one up while you can.

Both of these two units are complete and ready to go and will work with any A1200 or A600. Contact Power Computing on +44 (0)1234 851500, www.powerc.com or Wizard Developments on +44 (0)181 303 1800. Wizard also have a shiny new website with on-line ordering, www.wizard-d.demon.co.uk.

LZX goes free!

Jonathan Forbes, the author of LZX, has released a generic keyfile in response to popular appeal. He points out that this shouldn't be taken as indication that he is returning to development, it is just his present to the Amiga community. LZX is the most powerful compression system available and has been responsible for cramming more data on CU Amiga coverdisks than any other archiver. Cheers, Jonathan!. LZX users can now download and LZX keyfile from the aminet in util/arc.

Power A5000 grows!

A5000
68030-50
A5000

▲ **An A5000 up and running. Bring in the Clones!**

The Power A5000 desktop computer from DCE in Germany and the UK's Power computing is undergoing a minor change of specification, and interested readers will be glad to know that the changes will mean more power but not more money.

The A5000 is a being launched as a mid price machine, somewhere between the A4000 and the A1200, but in reality it is closer to the A4000 in spec while being closer to the A1200 in cost.

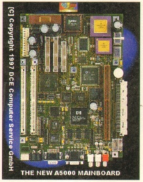
The board is designed to work as much as possible with industry standard parts without bringing in any of the larger changes being discussed by Micronik and Index. The idea is that it will offer 100% of the functionality of the Amiga, but at a much lower price. It will be fit into a standard PC style ATX case, use PC keyboards, and PC monitors via a scan doubler. An RF adaptor for TV use will be an option. The board will come with four Zorro II slots, two buffered IDE interfaces, and a flash EPROM for ROM updates. There will also be a bus slot for an Mpeg decoder card.

Originally the A5000 was going to be released as a 68030 system, as pictured here. However several potential suppliers of 68040 processors have turned up, and it is now looking almost certain that the A5000 will be fitted with one of these, without any significant rise in the price to the end user.

There had originally been concerns from some quarters that as appealing as it may seem in other areas, the issue of future upgradeability to PPC had to be resolved. Although no decision has been made at time of going to press, it now looks almost certain that the A5000 will be equipped for PPC usage in some way.

The A5000, whether equipped with an '030 or '040 processor, should be finalised in the next couple of months. Expect further news, including full pricing, then.

Contact Power Computing on +44 (0)1234 851500 or check out www.powerc.com and www.dce-com.de.



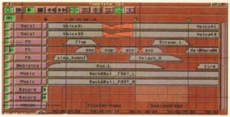
THE NEW A5000 MAINBOARD

Studio 16 Secrets Revealed

Sunrize users are getting some support again. Before the gold rush of AHI-compatible 16-bit sound cards came, there was a single word in serious 16-bit audio on the Amiga: the 8-track Sunrize AD516 (or AD1012 for those on a 4-track budget). Some still regard Sunrize's Studio 16 software as the ultimate word in audio editing, but Sunrize went out of business without sharing much of its developer information.

Kenneth Nilsen of Digital Surface has taken some significant steps forward to correct this problem. He has assembled free archives of new scripts and tools for Studio 16 cards, including an AIFF converter, as well as an on-line mailing list for Studio 16 enthusiasts. Write to majordomo@thule.no with "subscribe studio16" in the body to join.

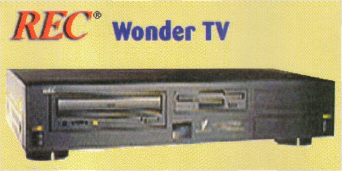
As of yet, nobody has been able to dig deeper than the software layer of these boards to determine how to write an AHI driver, which would enable the Sunrize cards to be used with the ever-growing list of applications, tools, and games taking advantage of AHI's flexibility. But this software breakthrough allows home and professional audio experimenters to share files better between Studio 16 and other audio tools and environments.



Stateside News

by Jason Compton: Editor in Chief of Amiga Report Magazine

Licensing Score



For those keeping score, Amiga International has released its list of official Amiga licensees for existing Amiga technology (or technology based around the Amiga design.) North America is represented in most sectors currently listed by AI.

While there are no companies doing A1200 tower rebuilds (such as Micronik of Germany), Nova Sector Engineering of Michigan is attempting to market A4000T-based custom workstations to the super-high-end Amiga market. The specs of the machines are impressive – the top of the line in Amiga hardware – but the prices reflect the "upscale" marketing approach the company is taking.

As has been expected for some time, QuikPak's Amiga license has been amicably renewed. QuikPak has been responsible for A4000T manufacture since Escom days, and took over distribution responsibilities in early 1996. Paxtron, a specialist in Amiga componentry and surplus inventory, has been rewarded for their hard work with a parts distribution license.

Software Hut of the US joins an elite group of licensed manufacturer/distributors of OS 3.1, and North American licensees currently represent fully one-third of the new "merchandise" licensees for t-shirts and other Amiga-badged sundries.

AI's license list is interesting in that it mentions "Future License contracts in sight," which one could take to mean that they are rather certain about them if they're publicly discussing it.

Among those listed is REC, the US-based manufacturers of the Wonder Amiga clone for the Chinese market, and a company only known as "Providential Technologies" who are apparently developing a new MPEG add-on for the CD32. Watch for more information on Providential in the future.

Dark Days In Oregon

Oregon Research, HiSoft's North American distributor, has apparently fallen on some difficult times. The company's president, Bob Luneski, has faced a staff exodus, falling sales and increasing debts. In a recent letter to customers and the market in general, he apologized for the company's recent poor service and promised a turnaround, provided that customers would respond to his call for help and generally reduced prices across the board. At the same time, Oregon Research cancelled the last of its Atari support. The company is responsible for Termite and Termite TCP, and has published other Amiga titles in the past.

For more information, Oregon Research can be reached at: www.orres.com.

Playing With TV

Playable TV of Pasadena, California is looking to turn the Amiga's powerful video capabilities into a multimedia revolution. The company is marketing Toaster/Flyer-based Amigas to companies looking for exciting, dynamic video presentations, which in this day and age is most anybody.

While not specifically marketed as Amiga-based, it is clear enough from reading their materials that Amiga technology is at the core of their systems. Their system boasts the ability to be configured remotely, to pull video from virtually any source, and rapidly interweave it with text, music, and special effects. While high-end, this is the sort of solution companies who can't afford in-house video specialists could be looking for. To read more about Playable TV, visit them at: www.playabletv.com.

WELCOME TO
PLAYABLE
TELEVISION
INTERACTIVE ADVERTISING & PRESENTATION SYSTEM

Advertisers Index

Active Technologies	60	01325 460116
Analogic	65	0181 546 9575
Blittersoft	28-29	01908 261466
Care	45	01923 894064
Classified	92-94	0171 972 6700
Dart	45	0116 247 0059
Enterprise Plc	27	01624 677666
Epic Marketing	34-35,OBC	0179 3490988
Eyetech	17,23	01642 713 185
First Computer Centre	44	0113 231 944
Golden Image	74	0181 900 9291
Harwoods	56-57,70-71	01773 836781
L H Publishing	82	01908 370230
Owl Associates	45	01543 250377
Power Computing	6-9,OBC	01234 851500
Sadeness	48	01263 722169
Selectafont	41	01702 202835
Special Reserve	41	01279 600770
Weird Science	IFC-3	0116 246 3800
White Knight Technology	79	01920 822321
Wizard Developments	54	0181 303 1800

Super CD-ROM 19

COMPLETE PROGRAM!
Scala MM300
It's what your Amiga was made for!
Plus: AlgoMusic
MrMPEG
ScanTek
Scion Genealogy
Utilities
Graphics
Modules
Web sites
Animations
PLUS
Picasso96 & CyberGraphX latest
Readers hits
Audio tools
Games
Gloom 3 - now works!

CU Amiga's Super CD-ROM 19 (or CUCD19 for short) is once again packed full of new software and all manner of files to keep you and your Amiga busy for the month ahead. Still not got a CD drive? Just look at what you're missing!

How much of what?

It's easy to miss where the real contents of a CUCD lies so here's a list of how much data lies in each directory. Headining the CD is Scala MM300 (see page 18 for a walk-through guide). Aside from that there's more than enough to keep anyone going for the next month, whether it's graphics, offline web browsing, music, programming, games, or simply tinkering with the many and varied utilities and tools to be found on the disc.

● Scala MM300	21Mb
● OpenBSD	54Mb
● CDsupport	63Mb
● System files	13Mb
● CD-ROM	12Mb
● Demos	13Mb
● Games	45Mb
● Graphics	38Mb
● Magazine	28Mb
● Online	114Mb
● Programming	72Mb
● Readers	32Mb
● Sound	32Mb
● Utilities	9Mb
● WWW	56Mb

Making the most of CUCD19

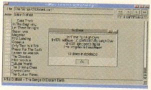
All CUCDs are designed to be used whether you boot from the CD or your normal Workbench. If you boot from the CD, everything is setup and ready to go. If you want to access the CD from your Workbench, you should first run InitCD.

This sets up various assigns and paths needed by programs on the CD, so if you don't do it, things won't work. It doesn't make any changes to your system, or write any files to your hard drive, all changes are temporary and can be reversed by running InitCD again.

Your own custom CD

In the past you had to use whatever file viewers we set up on the CD. since these had to work with all Amigas they were quite limited. From CUCD12 we decided to allow you to specify how the CD should work on your Amiga and included CDPrefs in the CDSupport drawer.

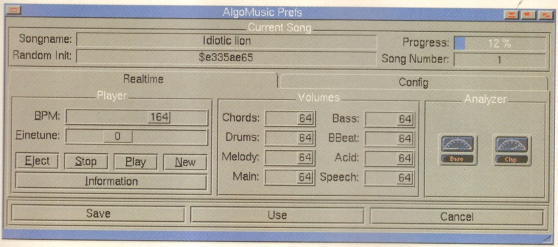
If you have never run this before you should be asked if you want to when you run InitCD. CDPrefs lets you specify which program you want to use to handle each type of file, graphics card users can view pictures in full 24 bit colour, ProjectXG users can listen to midi files through their midi card and people with sound cards can listen to mods with an AHI module player. It also means we were able to provided different defaults for Workbench 2.x users.



Once you have run CDPrefs, your setting will be saved to your hard drive and will be used every time you use this CD or any other CUCD.

Some people had problems with the original use of IDer, partly through a lack of understanding of how it worked and partly through a lack of explanation from us. All icons now use CUCDfile as their default tool, and the previous IDer problems should be a thing of the past. If you do have any problems, make sure you have run InitCD.

Highlights of CUCD19



Songname: Idiotic lion
Random Init: $e335ae65
Progress: 12 %
Song Number: 1
BPM: 164
Finetune: 0
Chords: 64
Bass: 64
Drums: 64
BBeat: 64
Melody: 64
Acid: 64
Main: 64
Speech: 64

▲ **Let your Amiga entertain you with sweet music as you settle back and relax. AlgoMusic is a clever little program which automatically composes and plays music in realtime. All you have to do is set a few preferences or even just go with the defaults. Don't expect anything to rival the classic composers, but it does a good line in happy hardcore (if that's possible).**

In addition to the main goodies, like Scala MM300 and OpenBSD, the CUCD drawer contains almost 500Mb of high quality material. These are a few highlights, but by no means all there is. The more time you spend looking through the CD, the more you will find.

Sound/AlgoMusic

Not only do we have the latest version of this random song creator, but this one comes with a superb set of extra samples for even better results.

Utilities/Birdie

Following on from last month's Workbench 2000 feature, here is another program to radically alter the look of your Workbench. Birdie lets you use graphics as patterns for your window borders etc. With the appropriate choice of pictures the results can be quite stunning.

Sound/MrMPEG

MPEGA is a superb MP3 audio player, but its command line options can be a bit daunting. MrMPEG provides a clean interface to MPEGA. As well as controlling the options, you can create and save play lists for future use.

Graphics/Gallery

Anyone with a fairly large collection of pictures will know what it's like trying to find the one picture you need. Gallery creates index pages of your pictures in HTML. By using HTML they can be viewed in any browser, and transferred to any other computer too.

CDROM/Isdbase

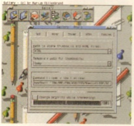
The CDID collection on this CUCD has almost 6000 CDs. Unless you install every one onto your hard drive, it can be very time consuming finding the one you want. Isdbase is a database that makes handling your CDID collection so much easier.

Utilities/Scion

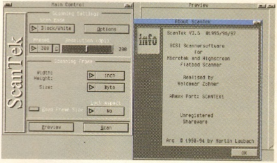
Scion is the Amiga's leading genealogy program. It has been developed over several years, and contains a wide range of powerful features, enhanced by a comprehensive Arexx port. If you've ever wondered about tracing your family tree, this is the program you need.

Graphics/UltraConv

As the name implies, this is a graphics conversion program, but there's more. UltraConv handles a wide range of graphics formats, and can convert single files or whole directories. As well as conversion, it also provides a number of image processing features, so you can alter the images at the same time as converting them.



◀ **Here's a novel use of HTML: Gallery makes up thumbnail reference pages for all of your picture files. You can then peruse and pick them off at will using a web browser. This has the advantage that you don't need to remember the often obscure filenames that are given to pictures when it comes to having to dig one out for a project.**



Black/White
300
300
Width:
Height:
Size:
Inch
Byte
No

ScanTek V3.5 ©1995/96/97

SCSI Scannersoftware
for
Microtek and Highscreen
Flatbed Scanner

Realised by
Waldemar Zohner

ARexx Port: SCANTEK1

Unregistered
Shareware

Arq © 1990-94 by Martin Laubach

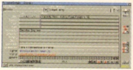
Graphics/ScanTek

ScanTek is a shareware driver for the Mustek and Highscreen range of SCSI flatbed scanners. These models are now available at very low prices and this evaluation version of ScanTek means you can check out both the software and the scanner before registering.

Online/RFCs

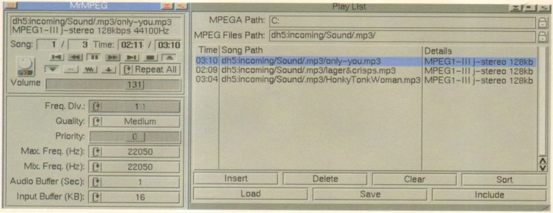
RFCs are the "rulebook" of the Internet. They were icncuded on a CUCD a year ago, but there have been many updates since then.

This directory contains the full set of current RFCs, useful for anyone with an interest in how the Internet works.



▲ **If genealogy's your game, take a look at Scion. It's a genealogy database type affair with lots of powerful features, including support for ARexx. Just the thing for tracing your family tree.**

What's on this month's CU Amiga CD?



dh5:incoming/Sound/.mp3/only-you.mp3
MPEG1-III j-stereo 128kbps 44100Hz
Song: 1 / 3 Time: 02:11 / 03:10
Volume 131
Freq. Div.: 1:1
Quality: Medium
Priority: 0
Max. Freq. (Hz): 22050
Mix. Freq. (Hz): 22050
Audio Buffer (Sec): 1
Input Buffer (KB): 16

MPEGA Path: C:
MPEG Files Path: dh5:incoming/Sound/.mp3/

```
Time  Song Path                                       Details
03:10 dh5:incoming/Sound/.mp3/only-you.mp3            MPEG1-III j-stereo 128kb
02:09 dh5:incoming/Sound/.mp3/lager&crisps.mp3        MPEG1-III j-stereo 128kb
03:04 dh5:incoming/Sound/.mp3/HonkyTonkWoman.mp3      MPEG1-III j-stereo 128kb
```

Scala MM300: The full version of this superb multimedia authoring package, so good that even IBM chose to use it for their video wall displays. The CD version also includes a large amount of support files that we couldn't possible have included on the floppy disk edition. If you don't have a CD drive yet, how many more reasons do you need to upgrade?

OpenBSD: There has been a great deal of demand for a good Unix implementation on a CUCD, and OpenBSD is the most up to date available. This is the full installation, in archived form. This is not for the faint-hearted. You don't run Unix under AmigaOS in the way that you can with, say, ShapeShifter or PC-Task. Unix will take over your machine, and you need a separate hard drive partition to boot from.

CDSupport: This contains various support files, such as mod players, anim players, GMPlay, MUI and ClassAct. Most importantly, this is where the CDPrefs program lives. With this you can customise your CUCD to launch your choice of program for each type of file.

CUCD: The CUCD drawer contains most of the CD contents, here is a selection of what each drawer holds.

CDROM: We have an updated collection of CDIDs, now with almost 6000 CDs, plus lsdbase, to create a searchable database from all your CDIDs. There's a demo of the new version of the MasterISO CD mastering package and the latest IDE-fix too.

Demos: A selection of whirly, flashy noisy stuff, perfect for people who like whirly, flashy noisy stuff. It includes the classic Andromeda Nexus 7 demo.

Games: A good selection of games including some more levels for Diamond Caves that was on the December cover disks. Following the problems some people have had with the previous copy of TFX, we've put the whole thing on this CD, together with a fixed script for transferring the files via a PC for those of you who have yet to upgrade your Amiga to CD.

There's an updated Gloom 3 demo, since the archive we received for the December issue had some files missing, making it unusable.

We have also included a massive collection of hard drive installers by the prolific Jean-François Fabre.

Graphics: The latest version of the Picasso96 and CyberGraphX3 graphics card software are here, together with several support programs designed to make life with a graphics card even more satisfying. PCD Manager is, surprisingly enough, a program for managing your PhotoCD collection. UltraConv and XLabProcess are image processing and conversion programs, and we there's some driver software for flatbed scanners to get the images into your Amiga in the first place.

Magazine: Full source code for the C tutorial and a large amount of support material and programs for SoundLab.

Online: The latest for Netheads, plus a selection of news postings so the modemless can see what some of the fuss is all about. There's also a complete archive of last month's postings to the CU Amiga mailing list. See who said what and why they are now regretting it :) There is also an update to last year's RFC collection, the full, current set of Internet standards.

Previews: We had hoped for a playable preview of Myst, but it wasn't available in time. To keep you going until next month, here are some screenshots.

Programming: The newest ClassAct and ixemul updates, plus a large archive from the "Library of Efficient Datatypes and Algorithms", containing useful material for those of you following the C tutorial.

Readers: Another selection of mods, pictures, games and utility programs, sent in by you. Next month it could be you...

Sound: Everything you need to make a noise with your Amiga. There's samples, MIDI programs, trackers, the latest Play16, a GUI for MPEGA and a brand new AlgoMusic, complete with an enhanced sample set.

Utilities: As usual, this drawer contains a wide variety of programs to make your Amiga so much easier, faster or more pleasant to use. There's in-depth information on hardware and software, a program to really change the look of your Workbench and the Scion geneaology program.

WWW: Another collection of WWW sites, together with a choice of browser to view them. Have a look at this sample of the sort of information that is available on the WWW, including the world famous CU Online site!

Disk doesn't load?

If your CD does not load contact DiskXpress on 01451 810788. If they advise that the CD is faulty send it along with a SAE to: CU Amiga Magazine Disk Returns, DiskXpress, 7 Willow Court, Bourton Industrial Park, Bourton on the water, Gloucestershire GL54 2HQ.

Please note that some CDs will not autoboot on systems other than CD32s, so try loading it from Workbench first. CUCDs will work with almost all Amiga configurations and filesystems. However, we recommend older CD filesystems be replaced where possible. A non-working program is *not* an indication of a faulty CD!

Eyetech's Sale Specials: 4-speed CDROM system - £99.95!!!; A1200 Magic Packs w/£180 worth of vouchers - £249.95; EZ-Tower A1200 systems from £349.95; EZ-IDE s/w from £12.50; 030 accel's w/4MB from £79.95, w/8MB from £89.95; 39 Mips '060/50MHz £278.95; A600 33MHz '030/MMU/FPU/standard simm to 32MB - £99.95 -- or with 4MB +£7 ; with 8MB +£14; LS120 £99.95; (Price down, New Product)

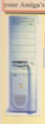
Q. What fits in a floppy bay and reads & writes 120 MB PC & Amiga cartridges AND 720KB & 1.44 MB PC diskettes?

A. The All-New LS120 ATAPI drive from Eyetech

- √ 120MB backup and PC 1.44MB diskette compatibility in one unit
- √ Bare Drive just £99.95 .120MB cartridges just £14.95/1 or £34.95/3
- √ EZ-IDE universal EIDE driver software is required - 50% discount when ordered with the LS120 or 4-device buffered interface . Upgrades available from Eyetech-supplied IDE-fix available - see below right.

HEALTH WARNING *"A buffered IDE interface is essential to avoid overloading of the A1200's IDE port when adding extra devices"- John Kennedy - AF - July 1997*

Don't be tempted to skimp. Fit an Eyetech 4-way IDE/ATAPI 3-chip buffered expander to preserve your Amiga's Health. *The original and best - Just £39.95.* Now with 50% discount off EZ-IDE software



The Mk2 EZ-TOWER - from just £99.95

See our full-page EZ-Tower feature advert in this magazine

... Or buy a CDPlus unit (below) and get an EZ-Tower for just £99.95*
(*as an alternative to the regular CDPlus case)

The Top-Rated Eyetech *CDPlus* for the A1200

- √ 8-, 16- or 24-speed external CDROM unit in quality, CE-approved case with heavy duty PSU
- √ Leaves trapdoor free for accelerators / memory expansion and the PCMCIA slot free for digitisers, modems, samplers etc
- √ Option to add additional HD's, CDRoms, LS120s, SyQuests, *IDE Zips*, Jazs, SyJets, ATAPI tape streamers etc powered from the CDPlus unit
- √ Comes with special Eyetech *'060-compatible* Mk2 4-device EIDE buffered interface board - easily fitted in minutes with no cutting/drilling (Note that IDE CDROMS *must never* be directly connected to the A1200 without a buffered interface - ask any qualified electronics engineer!)
- √ Gold plated audio phono sockets at rear (CD+ only) and front panel headphone socket and volume control

The CDPlus and SyQuest EZ135 drives. The IDE Zip Drive is the same size as the EZ135

Amazing Value - Prices down again!

4-Speed - *£99.95 see right*
8-Speed - *£148.95*
16-Speed - *£169.95*
24-Speed - *£179.95*

Xmas '97 Special - limited availability
4-SPEED A1200 CDROM SYSTEM FOR JUST £99.95!

Includes 4-speed CDROM, metal case, 4-device buffered interface, PC-type power supply & CDROM power cable, 40-way and 44-way IDE cables and instructions

Considering a PowerStation?

The CDPlus is now available with a, 230W, CE-approved, PC MiniTower* or Desktop* case (which can also power your A1200) - *for only £20 extra*
(*as an alternative to the regular CDPlus case)

Amiga User International - *97%* *"... It all worked faultlessly..."*
Amiga Format - *96%* *"... An absolutely superb bit of kit.."*
Amiga Shopper - *90%* *"... This is a quality product..."*

Amiga 1200 Magic Packs

- Direct to Eyetech from Amiga International Inc.

- √ Full UK specification with Kickstart 3.1/Workbench 3.1 disks and manuals, UK psu, mouse, mousemat and TV lead.
- √ Fantastic software bundle including Wordworth 4SE,Turbocalc 3.5, Datastore 1.1 Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz
- √ Three very special Eyetech bundles designed to meet every need and budget - al with 12 months return-to-base warranty

The Eyetech Starter Pack
Just £249.95

- √ Diskette pack as above with 2MB graphics/program memory and built in hard drive interface. Hard drive and memory expansion recommended for non-games use.
- √ ***Over £180 worth of discount vouchers for future hard drive, CDROM, accelerator/ memory and EZ-Tower upgrades from Eyetech***

The Eyetech Productivity Pack
Just £299.95

- √ As above with 2MB graphics/program memory and ***170MB hard drive*** . Just switch on & use straight from the box!
- √ Scala MM300 preinstalled on the hard disk (needs 4MB memory expansion to run properly)
- √ ***Over £180 worth of discount vouchers for future hard drive, CDROM, accelerator/ memory and EZ-Tower upgrades from Eyetech***

The Eyetech *EZ-Tower* Professional Pack
Just £799.95

- √ Full ***EZ-Tower*** with ***EZ-Key*** keyboard adapter, ***Windows95 keyboard***, and ***250W psu***, with software and manuals as above and with mouse, mousemat & TV lead. (No A1200 k/b or psu
- √ ***25MHz '040*** processor (approx 19 Mips) with MMU & FPU and ***16MB*** of program memory.
- √ ***1.7GB TowerDrive*** with Workbench 3.1 and shareware utilities preinstalled
- √ ***8-speed CDROM*** including the ***Eyetech 4-device buffered interface*** and ***fully registered CDROM/hard drive/IDE Zip drive/LS120 driver software preinstalled***
- √ ***880KB floppy drive*** including faceplate
- √ Fully installed and tested together with all relevant cables and manuals

AND the option to have fitted:

- √ An ***LS120*** 720KB/1.44MB/120MB drive/cable for ***just £99.95 extra*** (at time of purchase only)

EZ-IDE

New! Only available from Eyetech - *the* Amiga IDE ATAPI peripheral specialists. Probably the only har drive/CDROM/LS120/ZIP/SyQuest s/w you'll ever need

- √ Supports LS120, Zip, Jaz, SyQuest and other IDE/ATAPI removable cartridge drives AUTOMATICALLY. Cartridges just appear on the Workbench when inserted and disappear when ejected! Eyetech's IDE ZipPrep Tools are also included.
- √ Optimises IDE hard drive performance automatically. Eliminates 'MaxTransfer' nightmares.
- √ Extensive CDROM support including multidisk changers, direct digital audio transfer, CD32 emulation, high performance filesystem support for Amiga, Mac and PC CDs.
- √ Ready-to-use as shipped. No sending away to foriegn parts for registration codes as with the 'commercial' versions of IDE-fix97 and Atapi Pn'P.

EZ-IDE s/w	**£34.9**
Upgrade from Eyetech-supplied* IDE-*fix*	**£12.5**
With* 4-dev i/f, CDPlus, IDE Zip or LS120	**£17.5**
Competitive u/grade*	**£24.9**

**Trade-in & proof of purchase required*

BirseeSoft for the AMIGA

- √ The most comptrehensive, fastest printing system for all WB2.x+ Amigas
- √ Supports the latest printers from Epson, Canon, HP

Introductory Price **£39.95**

The Amazing Iomega *IDE* Zip Drive

Another first from Eyetech

- √ *Use a different cartridge for each application or family member*
- √ *Ideal for transferring multimedia data between Amigas and/or other platforms*
- √ ***Fits in any Amiga/desktop/minitower floppy drive bay or in external case***

CARTRIDGE CHANGES AUTOMATICALLY RECOGNISED

The IDE Zip drive fitted in an A1200

Bare IDE Zip drive *(inc Eyetech V2.0 Ziptools)* - **Just £99.95**
EZ-IDE **(or equiv) software required - Just £17.50 with drive**
100MB Zip cartridges just £14.95/1 or £34.95/3 (*A600/1200 buffered interface needed)

STOP PRESS! - While stocks last
600dpi 1-pass, 24-bit, SCSI A4 flatbed scanne
WITH ScanQuix 3 Amiga scanner software
Just £199.95 (inc PC & Mac s/w)

A1200 *TowerDrives*

TowerDrives **are *only* available from Eyetech**

The A1200 3.5" InstantDrive

Important Note!

Thinking of buying a **BIG** drive? Dont waste your money on ***ANY DRIVE OVE 4.3GB*** as the Amiga O/S doesn't support it! (2^32-1 bytes actually). They appear to work but overwrite the RDB after 4.3GB into the drive. Be warned!

- √ All drives come ready-to-use with WB3.0 preinstalled & WB2.x install script.
- √ All drives over 350MB also come with over 45 top quality utilities (not shovelware) *and* MMe multimedia authoring software preinstalled, configured and ready-to-run

TowerDrives:			
		1.2GB	£129.9
1.7GB	£149.95	2.11GB	£159.9
3.2GB	£189.95	4GB *(to the limit!)*	£249.9

2.5" InstantDrives for the A600, A1200, SX32 & SX32 Pro

20MB	An entry-level drive ideal for the SX32Mk2 and A600. Limited stocks	£34.9
170MB	A 2.5" drive ideal for the SX32Mk2 and for the A1200/A600	£79.9
540MB	A fast, superslim drive with ample capacity for most users	£129.9
1.08GB	The high performance superslim drive is ideal for power users	£179.9
1.8GB	This top-of-the-range drive is perfect for the A1200 & SX32Pro	£189.9

D-I-Y and Bargain Corner

Hard-to-find parts for your Amiga project

Hard , floppy drive cables and cases	
2.5"-2.5" 44-way 2.5" HD cables 9cm **£8.95**, 13cm .**£9.95**, 60cm	£19.95
2.5" 3x44-way hard drive cables for 2 x 2.5" drives (6cm+6cm)	£12.95
3.5" power & data cables for A600 & A1200 **£14.95**; full fitting kit	£24.95
3.5" external hard drive case **£19.95**, 3.5" removable drive case	£24.95
3 x 40-way IDE cable for 3.5" HD/CDROM -85cm/2' 9"	£9.95
Custom 3 x 40 IDE cables to 1.5m/5' (enclose drawing)	£19.95
3.5" hard drive to 5.25" bay mounting adapters	£5.95
2.5" hard drive to 3.5" bay with 3.5" data/power cable adapters	£11.95
3.5" floppy/SyQuest/Zip drive to 5.25" bay mounting adapters	£6.95
40 pin m-f detachable data cable forexternal 3.5" HD/CDROM's	£9.95
Slimline external floppy/IDE SyQuest/IDE ZIP/IDE Jaz case	£9.95
SCSI cable 25way 'D'(m)to 50way Centronics (m) (1m)	£9.95
SCSI cable 50way Centronics (m) to 50way Centronics (m) (1m)	£9.95
2 x 34pin ribbon cable + faceplate for A1200 int'l floppy in tower	£12.95
23p-M to 23p-F external floppy ext'n cable **0.5m £12.95; 2m**	£14.95
Audio & video cables and adapters	
3.5mm stereo jack plug to 2 x phono plugs for CDROM	£5.95
CDROM standard 4 pin inverted T audio connector & phono plugs	£9.95
Phono plug x 2 to phono plug/socket x 2 audio mixer leads	£6.95
Stereo 2 x phono plug to 2 x phono plug 1.1m/4' (4.8m/16' £9.95)	£4.95
Stereo speakers (pair), with amp (16wPMPO) & mains psu	£9.95
Power supplies , cables and PC towers//desktops with integral psus	
IDE or SCSI CDROM case, 40w PSU, audio & data connect's	£59.95
Enhanced metal cased PSU for A600/A1200/CD32/CDROM/ external HD (fit your old lead - instructions provided)	£29.95
Mini-tower or desktop case with 200W/230W PSU, CD & HD/Zip bay, power lead connector block, resistor, cable restraint etc, & full instr'ns	£39.95
Genuine CD32 PSU **£14.95**; Genuine A1200 PSU	£19.95
4-pin M-F HD prw extn 0.9m/3' **£9.95**; 4-pin(m)->2x4-pin(f) splitter	£6.95
23 pin m floppy drive connector to 4 pin HD/CDROM power plug	£9.95
Miscellaneous	
A1200 /SX32 internal cooling fan - dissipate that extra power!	£14.95
VGA 23-15 pin adapter for A500/600/1200 **£12.95**; buf for A4K	£19.95
A4000 kbds (new) for CD32/A2000*/3000*/4000 (*adapter +£5)	£39.95
50MHz capable PGA FPU £39.95; A1200 RAM boards	£29.95
Amiga CDROM disks - our selection - 5 for	£10.00
A1200/A600 internal floppy drives £24.95; A1200 keyboards	£29.95
Amiga microswitched mouse with mousemat	£6.95
ScanQuix3 PC printer cable adapter - parallel Epson scanner	£9.95
28.8/14.4 compact data/fax modems £39.95, **14.4/14.4 from**	£19.95
A1200 Workbench 3.0 disks (5) £14.95 WB3.1 disks (6)	£19.95

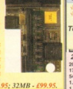
Four new Amiga Expansion Products from Eyetech

PortPlus - high speed serial and parallel port expansion

- √ *2 x **460Kbaud** buffered serial ports with low CPU overhead*
- √ *PC & Amiga compatible parallel port transferring up to **500K bytes/sec***
- √ *Very easy to fit **& leaves PCMCIA & trapdoor free. Zorro versions too!***

PortPlus - 2x serial & 1 x parallel - *just £89.95!*
PortJnr - 1 high speed serial port - *just £44.95*
New! PortPlusZ3 - 2xP & 1xS - £69.95; PortPlusZ4 - 4xS - £89.95
PortXtra - adds extra 2xS & 1xP to PortPlusZ3/Z4 Zorro cards - £59.95

Apollo Accelerators - Unbeatable pricing



A600 - **33MHz '030 with MMU & FPU exp to 32MB**		*£99.95*
Entry level A1200 Accelerators - Unbelievable value		
25MHz '030 with MMU & FPU. (5 Mips)	*- Just*	*£68.95*
33MHz '030 with MMU & FPU. (7 Mips)	*- Just*	*£79.95*
Power User A1200 '040/'060 accelerators (no tower req'd)		
25MHz '040 with MMU & FPU. (19 Mips)	*- Only*	*£138.95*
33MHz '040 with MMU & FPU. (25 Mips)	*- Only*	*£158.95*
40MHz '040 with MMU & FPU. (30 Mips)	*- Only*	*£198.95*
50MHz '060 with MMU & FPU. (39 Mips)	*- Only*	*£278.95*
66MHz '060 with MMU & FPU. (51 Mips)	*- Only*	*£339.95*

A Standard A1200 is rated at 1.3 Mips. All measurements from Sysinfo

Memory : 4MB - £14.95; 8MB - £24.95; 16MB - £49.95; 32MB - £99.95.

Interface Island

Where your Amiga does more

A1200/A4000 non-Zorro	
4-device A1200 buffered EIDE i/f	£39.95
4-device EIDE interface for A4000	£19.95
EZ-Key **A1200-PC/A2000 k/b adapt'r**	£39.95
EZ-DF0 **interface for Sony floppy**	£14.95
EZ-DF0 **i/f, with Sony floppy & cable**	£39.95
DiskPlus **DD/HD Amiga & PC 2x FDD i/f**	
- for A1200 hard drive IDE port	£64.95
- for A1200 clock port	£69.95
- for A4000 IDE port	£69.95
PortPlus 2x 460Kbaud ser + 1 x par	£89.95
PortJnr 1x 460Kbaud serial port	£44.95
Audio mixer skts/leads for EZ-Tower	£19.95
Zorro II/III	
GG2+ - use PC cards in Z2 slots	£129.95
IDEPlus 3x2 IDE + 2x DD/HD PC & Amiga floppies. With full IDEfix CDROM s/w	£79.95

SX32Mk2 - £149.95
SX32Pro50 - £299.95
SX32Pro40EC-£249.95

ScanQuix3 Scanner Software

for all Epson parallel or SCSI scanners and HP, Mustek, Artek SCSI scanners

"An excellent piece of software"
Gold award - Amiga Format 11/97

- √ 24 bit scanning with full range of editing options
- √ 'Scan-to-disk' option in Jpeg or IFF formats
- √ Stand-alone use or integrates with your Art package (Photogenics, ImageFX, AdPro, XiPaint, Pagestream 3, DPaint5, ArtEffect, PPaint)

ScanQuix v3.0 - only £59.95

Eyetech Group Ltd
The Old Bank, 12 West Green,
Stokesley, N Yorks, TS9 5BB, UK

Tel UK: 07000 4 AMIGA
01642 713 185
Tel Int'l: +44 1642 713 185
Fax: +44 1642 713 634
eyetech@cix.co.uk
www.eyetech.co.uk

Voted AUI Amiga Company of the Year 1996/7

EYETECH

Next Day delivery to EC and USA/Canada Worldwide deliveries in 2-7 days from receipt of faxed order and payment detail (eg SX32 next day to NYC £25.30)
UK m'land next day insured del'y charges: S/w, cables, buffered i/f £3; 2.5" drives, acce mem boards £6; manuals £7; 3.5" drives, modems, psu's £8.50*; Twrs, CD+ £10*. (*2d
Ring/fax/email for other delivery costs

UK bank/building society cheques, Visa*, Mastercard*, Switch, Delta, Connect, Posta Money orders accepted. * A 3% surcharge applicable to all credit card orders.
Due to space limitations some of the specs given are indicitive only - please ring/write f further details. **Please check prices, spec and availability before ordering. If orderin by post please include a contact phone n** Goods are not supplied on a trial basis. E&O All prices include VAT at 17.5%. VAT is not applicable to non-EC orders

COVER DISKS

Scala MM300

AMIGA
DISK 174
SCALA
MM300
It's what your Amiga was made for!
FULL PROGRAM
AMIGA

Scala MM300 is an incredibly versatile multimedia authoring system. It allows you to make visual presentations, slideshows, video effects, video titling, interactive information services and lots more if you put your mind to it.

One of Scala's best aspects is its usability. Almost anyone can pick it up in a matter of minutes and be baning out slick and professional looking projects with ease. For the more technical user there's also an ARexx port to allow automated processes to be set in motion.

Loading instructions

You can run Scala straight from the CD or simply drag the Scala drawer over to your hard drive. Click the MM300 icon to start the main program. Disk users have a simple installer. Boot from your hard drive and insert the first cover disk. Open the disk and then drag the icon that appears over the required destination on your hard drive. Scala will then be installed. You'll find some additional Scala data on the second cover disk. Copy the contents of the Fonts drawer into the Fonts drawer of your Workbench or Sys: partition on your hard drive. The fact that you don't have many data files on the disks doesn't detract from the use of Scala, as you'll be using most of your own graphics, animations and sounds once you get the hang of it.

Scala is one of the best Amiga programs ever to have been written. No other program takes advantage of the Amiga's unique hardware to the same degree, producing such professional results. Once you've seen it in action we can guarantee you'll be amazed. Nothing else comes close to producing such powerful video effects, synchronised sound and sheer professional smoothness.

Scala is still used by professionals to this day, and you'll soon see why. Scala pops up everyday on television, in Hotels, in information kiosks and museum exhibits.

What can it do?

What can't it do! You might think that Scala is nothing more than a glorified home video titling program. It's not - is much, much more. In many ways Scala is a complete visual programming suite. It's easy to use because it has a special interface called Human Touch, which is designed to be as "point and click" as possible. However, there is also an underlying programming language called "Lingua" if you want get down to low-level coding.

Scala is extremely flexible. It comes with software extension modules for driving extra hardware, such as CDTV's or genlocks. Scala also speaks ARexx, which means it can communicate with other applications, including AmigaDOS itself.

When it comes to good timekeeping, Scala is unbeatable. Pictures load in a flash, and you can play standard Amiga ANIM files back-to-back with no pauses or skipping. Larger files can be spooled directly from hard disk, and Scala also supports MIDI for high quality music when used with extra hardware. You can also use standard MOD files to provide a soundtrack for your animations, and with a unique real-time recording you can quickly synchronise everything perfectly.

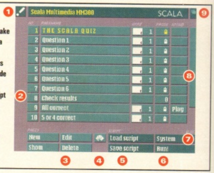
With its extensive collection of text effects and wipes, Scala can produce effects on an A1200 which even top of the range PCs still can't get close to matching. Smooth scrolling text, excellent fades and professional subtitle features... it's like having your own multi-thousand pound digital effects studio.

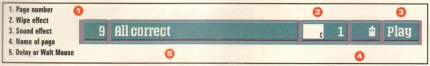
What can you use it for?

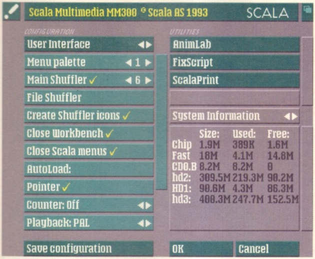
Scala can be used for anything which makes use of graphics or sound. Here are some examples of what you can use Scala for - with it's standalone player program you can create dazzling presentations to impress your friends.

Slideshows, titling your home videos, creating interactive training applications, quiz programs, linking animations together for recording to video tape, adding sound effects to animations, creating music videos, writing games, multimedia, stand-along information kiosks, business presentations, show window displays, museum exhibits,..

1. **Click here to quit**
2. **The pages which make up the current Scala project**
3. **Page control buttons**
4. **Swich to Shuffler mode**
5. **Load/Save buttons**
6. **Run the current script**
7. **System properties screen**
8. **Scroll bar**
9. **Toggle to a differnet screen**




1. Page number
2. Wipe effect
3. Sound effect
4. Name of page
5. Delay or Wait Mouse
①
②
③
9
All correct
1
Play
⑤
④


Scala Multimedia MM300 © Scala AS 1993
SCALA
CONFIGURATION
UTILITIES

User Interface
Menu palette 1
Main Shuffler ✓ 6
File Shuffler
Create Shuffler icons ✓
Close Workbench ✓
Close Scala menus ✓
AutoLoad:
Pointer ✓
Counter: Off
Playback: PAL
Save configuration

AnimLab
FixScript
ScalaPrint
System Information

	Size:	Used:	Free:
Chip	1.9M	389K	1.6M
Fast	18M	4.1M	14.8M
CD0.B	8.2M	8.2M	0
hd2:	309.5M	219.3M	90.2M
HD1:	90.6M	4.3M	86.3M
hd3:	400.3M	247.7M	152.5M

OK
Cancel

Introduction to Scala

When you first launch Scala, you'll see the main editing window. From here you can create and edit the individual pages which make up a Scala "Script". From here you can also load and save previously created scripts, alter the system settings and start the current script running.

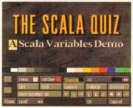
You'll notice that the Scala system looks slightly different from standard Amiga windows. Don't worry – if anything, it's even easier to use. There are no menus to appear, so don't waste your time with the right mouse button.

Each page in the script is represented by one numbered horizontal bar. You can see the page as it will appear in the finished script by clicking on the Show button in the bottom left, and then selecting the page.

The page bar has five parts to it. The number, the title, the wipe effect, the timing delay and the sound event. This makes it easy to alter the properties of the page: for example, if you want the page to automatically move on after a second's delay, click in the timing area and a window will pop up allowing you to choose the delay. The picture of the mouse means that the page will move on only after the mouse has been clicked.

At the bottom of the main editing window is the Shuffler button. Click here, and instead of the horizontal bar display you'll see an array of images. These are the pages which make up the script, and in this mode it's easy to get an overview of your script and re-arrange the order of pages as needed.

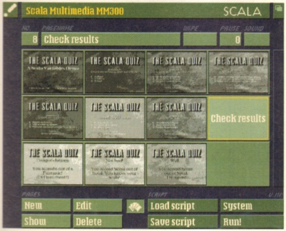
If you select the System button, you bring up this screen for altering various settings. You can change the colour of the screen for example, or alter the size of the Shuffler images. If memory is limited, you can switch off the Workbench display and you can also check on theinstalled EX modules (for controlling external hardware) and launch the Scala support utilities.


THE SCALA QUIZ
A Scala Variables Demo

▲ Make your own interactive presentations.

When you want to edit a page, or create one, return to the main display. You can edit an existing page by clicking on the Edit button, or by double-clicking on the page name. This will pop up a display like this one.

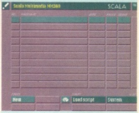
This looks like quite a complicated display, but it's very easy to use. From here you can enter text onto the page: simply click and start typing. The various buttons allow the font, size, colour and style of the text to be changed. The "In" and "Out" buttons allow you to control how the text appears and disappears. You can also create buttons and load brushes and backdrops, but we'll cover that in more detail later.


Scala Multimedia MM300
SCALA
NO.
PAGENAME
WIPE
PAUSE
SOUND
8
Check results
0
THE SCALA QUIZ
Check results
PAGES
SCRIPT
New
Edit
Load script
System
Show
Delete
Save script
Run!

▲ Everything is presented in clear graphical formats, making it a breeze to use.

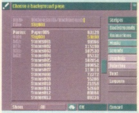
Creating your own Scala Project

One of the best ways to learn the workings of any package is to get stuck into a new project from scratch. We'll start with a fairly simple one that includes some moving graphics and a bit of sound too. Here goes...


Scala Multimedia MM300
SCALA
New
Load script
System

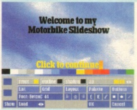
▲ **Step 1**

Start Scala running. You'll be greeted with a totally empty script, ready for you to get started. Let's create our own extra flash slideshow, complete with musical soundtrack: so get some of your favourite pictures and MOD files ready.


Choose a background page
Scripts
Backgrounds
Animations
Music
Sounds
Symbols
Palettes
Text
Layouts
Show
All
OK
Cancel

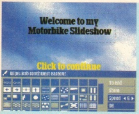
▲ **Step 2**

Click on the New button to create the first page. Scala will prompt you for a backdrop texture. Click on the Shuffler icon if you want to see what they all look like. The number of backdrops will depend on whether you are using the CD-ROM version or not, but you can use any image as a backdrop.


Welcome to my
Motorbike Slideshow
Click to continue!
Front
Outline
Shadow
List
Grid
Layout
Palette
Buttons
Font: Beton: 44
Show
Load
OK
Cancel

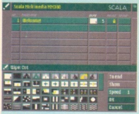
▲ **Step 3**

Now add some text. This is going to be our title screen, so a little introduction is necessary. You will have to change the colour of the text (click on a colour from the palette, and font to make it more legible.and then on Front) and also it's size


Welcome to my Motorbike Slideshow
Click to continue
Wipe: Bob southwest easeout
To end
Show
Speed ◂ 6 ▸
OK

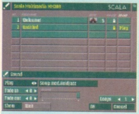
▲ Step 4

Let's make it a little more interesting. Select the text (drag a box around it) and then click on the button marked In. You'll see a window containing all the possible ways of making the text appear. Try them out (using Show) and then select your favourite.


Scala Multimedia MM300
SCALA
1 Welcome
Wipe: Cut
To end
Show
Speed 1
OK
Cancel

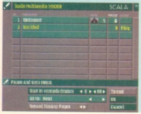
▲ Step 5

Click OK, and you can name your page. Click OK again, and you will be back at the main editing screen. We don't need to alter the timing as it is already set-up to wait until a mouse click (right button this time), but you might want to click on the Wipe button and select a new style for the entire page to appear.


Scala Multimedia MM300
SCALA
1 Welcome
2 Untitled
Play
Sound
Play
Song: mod.mudtrace
Fade in
Fade out
Loops
Show
Start
OK
Cancel

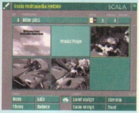
▲ Step 6

Let's get some sound going. On the second page bar, click in the empty sound slot. You can now select some music to play: click on the left-most button to change to play, and then select a MOD file. You can now alter fade ins and outs, and


Scala Multimedia MM300
SCALA
1 Welcome
2 Untitled
Play
Pause and Goto Menu
Wait in seconds:frames
Go to: Next
Record Timing: Pages
To end
OK
Cancel

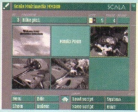
Step 7 (see bottom of previous column)

Alter the timing now, or the music will start and nothing else will happen until the mouse is clicked. Alter the Wait setting to 0s, and that will mean the page will move on as soon as the tune has started. You should give this page a name - click on the page number and enter a title.


Scala Multimedia MM300
SCALA
3 Bike pics
Music Page
New
Edit
Show
Delete
Load script
Save script
System
Quit

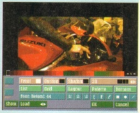
▲Step 8

Now add the pictures which make up the slideshow. This is easy: click on New, and then select the picture you want as the backdrop image. Repeat this for each picture, until you've added them all. Use the Shuffler mode to see the pages as you make them.


Scala Multimedia MM300
SCALA
3 Bike pics
Music Page
New
Edit
Show
Delete
Load script
Save script
System
Quit

▲Step 9

The final step is to adjust the timing. Alter each of the picture pages to pause for a few seconds, rather than wait for the mouse click. Depending on the pace of the slideshow, 3 to 5 seconds will be more than enough. Alter the Goto: setting of the last page so that it loops back to the first image.

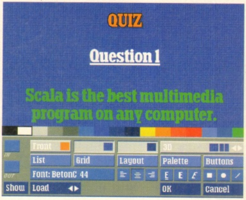

SUZUKI
Front
Outline
Shadow
3D
List
Grid
Layout
Palette
Buttons
Font: BetonC 44
Show
Load
OK
Cancel

▲Step 10

That's it all done! Run your script now, and watch your classy slideshow complete with music backdrop. When you get more adventurous you will be able to synchronise the slide changes to the music, or even playback animations and a running commentary.

Interactive quiz project

Let's now look at how Scala allows interactive presentations to be made. The easiest way to do this is to examine buttons, and how they can cause your script to jump to specific pages rather than simple appear one after the other. We'll use a simple pub quiz machine format as an example. This could be adapted for all kinds of other applications. Should you ever get contracted to design and build an information kiosk for a historical town centre (well you never know) you could have buttons which launched digitised movie clips of horse drawn carts and people in funny hats. Not that it's that likely, but you get the idea. Alternatively you could make an interactive multimedia database of your favourite things, whether that's rare dog breeds, classic cars, steam trains or international cheeses.


QUIZ

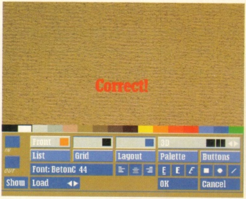
Question 1

Scala is the best multimedia program on any computer.

IN
OUT
Front
3D
List
Grid
Layout
Palette
Buttons
Font: BetonC 44
Show
Load
OK
Cancel

▲ Step 1

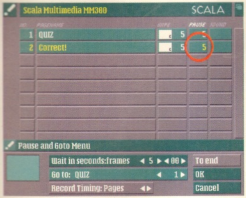
With an empty Scala script to start with, create a new page by clicking on he New button. Now enter some text introducing the quiz, and the first question. Design the question to have a Yes or No answer. Save the page.


Correct!

IN
OUT
Front
3D
List
Grid
Layout
Palette
Buttons
Font: BetonC 44
Show
Load
OK
Cancel

▲ Step 2

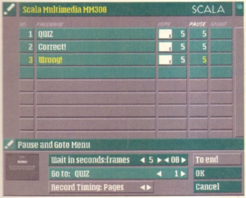
Now we need to create a page which will be displayed if the user of your script gets the answer to the question right. All you have to do is define another new page, and include the word "Correct!" right slap bang in the middle, like this.


Scala Multimedia MM300
SCALA
NO. PAGENAME WIPE PAUSE SOUND
Pause and Goto Menu
To end
OK
Cancel

NO.	PAGENAME	WIPE	PAUSE	SOUND
1	QUIZ	5	5	
2	Correct!	5	5	

Wait in seconds:frames 5 : 00
Go to: QUIZ 1
Record Timing: Pages

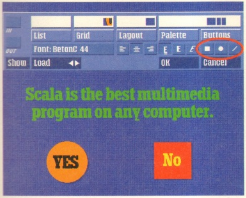
▲ **Step 3**
After the answer has been displayed, we want the quiz to start again. If you want to add other questions, then you would jump to the next question page in the script. From the main edit window, select the Pause setting and alter the Go to: to jump back to the Question page.


Scala Multimedia MM300
SCALA
NO. PAGENAME WIPE PAUSE SOUND
Pause and Goto Menu
To end
OK
Cancel

NO.	PAGENAME	WIPE	PAUSE	SOUND
1	QUIZ	5	5	
2	Correct!	5	5	
3	Wrong!	5	5	

Wait in seconds:frames 5 : 00
Go to: QUIZ 1
Record Timing: Pages

▲ **Step 4**
Repeat this for the page which is displayed when the wrong answer is given. Again, alter the Go to: part so that it leaps back to the start of the script and the first Question page. You might want to add some wipes and sound effects at this point.

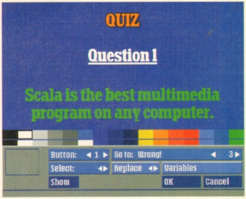

IN
OUT
List
Grid
Layout
Palette
Buttons
E E E
■ ● /
Show
Load
OK
Cancel
YES
No

Font: BetonC 44

Scala is the best multimedia program on any computer.

◀ **Step 5**
Now we can edit the Question page to add the Yes or No buttons. The easiest way to define a button is to draw out a shape using of the shape definition buttons. Draw two shapes and then add some text on top of them with Yes or No.

▶ **Step 6**
To make these shapes into buttons click on Buttons. You can define buttons by marking a region of the screen, or selecting an existing object. Right-click to make the control panel disappear, and select one of the shapes with a right click. Right-click again, and the button is defined.


Select:
Replace
Variables
Show
OK
Cancel

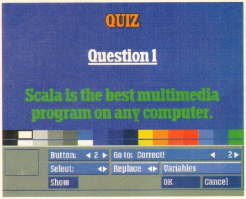
QUIZ

Question 1

Scala is the best multimedia program on any computer.

Button: 1
Go to: Wrong! 3

▼ **Step 7**
You can now define which page the button will lead to: obviously this depends on the question. Repeat for the second button – notice how you can click on the arrows beside Button: to change the currently selected button.


Select:
Replace
Variables
Show
OK
Cancel

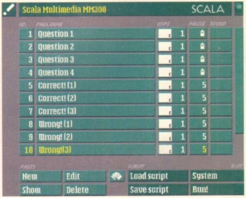
QUIZ

Question 1

Scala is the best multimedia program on any computer.

Button: 2
Go to: Correct! 2

▼ **Step 8**
That's all there is to it! You can now run your script and test yourself to see if your answers are right. You can then add more pages, more questions and more sound effects. Scala also has internal variables which can keep score: something to add later.


Scala Multimedia MM300
SCALA
PAGES
SCRIPT
New
Edit
Show
Delete
Load script
Save script
System
Run!

NO.	PAGENAME	WIPE	PAUSE	SOUND
1	Question 1	1		
2	Question 2	1		
3	Question 3	1		
4	Question 4	1		
5	Correct! (1)	1	5	
6	Correct! (2)	1	5	
7	Correct! (3)	1	5	
8	Wrong! (1)	1	5	
9	Wrong! (2)	1	5	
10	Wrong!(3)	1	5	

DIY Scene: CDDA Mixer

Combine your Amiga and CD-ROM audio outputs with this month's quick and dirty DIY project.

All modern CD-ROM drives come with audio output connections. A headphone socket is standard on the front panel, but there's also a less obvious output on the back, commonly referred to as CDDA (CD Digital Audio). Wouldn't it be handy if you could patch this into your Amiga's audio output?

You could then have just one stereo connection feeding your speaker system. Even though the A4000 and A3000 have connections on the motherboard specifically for this, even then the level of the CD audio is much lower than the Amiga audio, so this month's project is quite applicable to all Amigas.

Background info

This little project is based around the highly useful TDA2822 stereo amp chip, which makes life a lot easier. Most of the components are on-board the chip so very few external components are needed. Figure 1 gives you the schematic for our little amp and you can clearly see that the whole project fits onto a small PCB.

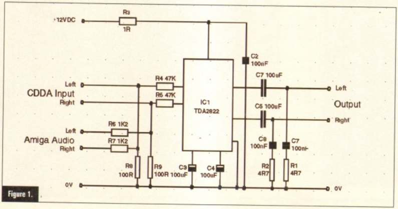


Figure 1.

The two audio sources are fed into the inputs of the chip via the resistor array comprising R4 to R9. The TDA2822 does its work and the outputs are fed out through C5 and C6. These capacitors are present to block potentialy harmful DC current reaching the output conections. R3 is a small current-limiting resistor and the decoupling is done via C2. Due to the fact that this project will be run from the computer's power supply, decoupling of the electrical supply isn't really needed, but should you decide to run it from a different supply, a 470uF electrolytic capacitor should be fitted across the supply rails the same as C2. R1 and R2 give a preset output impedance of about 8 ohms and should suffice for most applications.

Step 1: the PCB

And so to actually make the PCB. This month we have chosen to use stripboard because of the simplicity of the project and to create the availability of parts to everyone. There is no need to actually order special parts, and everything can be purchased from Maplin Electronics (see the parts list).

Firstly, we need to mark out and cut the stripboard. You will need a piece which is 19 holes long by 7 holes high. It is possible to cut the board by scribing along the strip of holes to cut with a craft knife and ruler. Once the board has been scribed, gently flexing it in either direction will result in it cracking. Hopefully, if you made the scribes deep enough, it will crack along the marked lines. Do take care when trying to crack the board. Do it very gently until you hear it start to crack. Otherwise it is a job for a hacksaw and lots a patience.

Note that the strips should run along the board and not up and down. Check the picture to see how it should look – it also shows where the traces should be cut. These cuts can be made very simply by using a drill bit of about 5 or 6mm in diameter. Rotate the drill by hand in the hole that corresponds to the cut in the trace. The drill will start to remove the copper. Keep going until all the copper around the hole is removed. Repeat this process for all the cuts, 14 in all.

An important note to make here is to make sure that all the bits of copper are removed otherwise these will short out neighbouring traces. Using a craft knife, run it down the insulator strips at each trace to ensure they are clear. If you have a continuity tester or a multimeter, check that no short circuits exist. Care should be taken when handling stripboard as it can be very fragile, and too much pressure in one area can lead to the board cracking along a run of holes. If you need to push hard (you may have a blunt drill bit!), support the board on a hard surface.

Required Tools

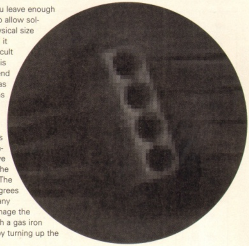
Phillips screwdriver
Soldering iron
Solder
Craft knife (if your not sure about this, get an adult to help you)
Ruler (straight edge)
Wire strippers
Multimeter (continuity tester)

Optional but useful
Tweezers
Straight screwdriver
Digital multimeter
Heat shrink sleeving
Side cutters
Hacksaw
"Helping hands" soldering tool

Step 2: soldering

So now we need to start soldering the components in place. There is no real order in which to do this, but I found it easier to start with the smaller components first. Check the circuit board picture for reference. Hold the board as in the picture. The left hand side is where the CDDA header socket fits on so turn the board over so that the left side stays the left side. Try to keep the board up this way until you start to put on some of the components. I'd hate to think you put the parts on with the board upside down!

The wire links are fiddly so it is probably better to start with these. Figure 3 shows how the links fit in. A tip here is to use the legs cut off the components to make the links, but do make sure you leave enough wire on the components to allow soldering. Because of the physical size of the traces on stripboard it makes soldering quite difficult to the beginner. To ease this situation I would recommend you buy one of refillable gas soldering irons. Most mains soldering iron tips maybe too large, but you could file them down.



Another benefit of a gas iron is the heat. Many components don't like excessive heat especially chips and the TDA2822 is no exception. The chip will withstand 300 degrees for about 10 seconds but any more will undoubtedly damage the part beyond useability. With a gas iron you can alter the tip heat by turning up the gas setting.

Soldering is the most important part of any kit building, as not enough heat will result in something known as a 'cold solder joint'. These set up a large resistance at the joint and can be a real pain to track down, but by the same token, too much heat will start to kill electronic components. See DIY Scene in the November issue for more soldering tips.

Step 3: plug ins

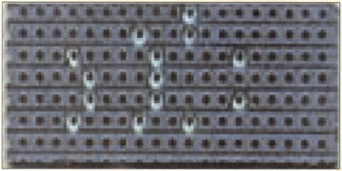
So now you should have the wire links soldered in. Link 1 is in a rather awkward place and you need to make sure that any surrounding components do not short out on it, so bend it accordingly to clear it away from the holes. By looking at figure 4, you can start to place the rest of the parts into their positions. Figure 4 shows component location and the holes used by each (as designated by a small black circle). I would recommend installing the resistors next.

Start from the left hand side and work your way across. As each component goes in, the legs should appear through the board into a trace. If for some reason you end up with a leg on a cut, you have either put it in the wrong place, or you have the board the wrong way round. Capacitors would be next, and again start from the left and work across. Referring to Figure 4 again, note that C3 to C6 are electrolytic and, as such, are polarised.

This means that they have to go in the right way around. If you put them in backwards they don't work well. Each of the capacitors has markings on the body, usually in the form of a line that points to one of the legs. It may have minus signs in the line and this shows that the indicated leg is the cathode or negative connection. Figure 4 shows the polarity of these parts. C2, C7 and C8 are not polarised so they can be fitted either way around.

Then comes the CDDA header socket. Again care should be taken to avoid shorts with the wire link L1. And lastly the TDA2822 chip itself. One note here is that the chip has to be oriented correctly. If you look at the top of the chip you'll see that it either has a small scollop in one end or a small dot.

In the case of the dot, this marks pin 1, whereas the scollop if it were at the top, pin 1 will be the one at the top left. A warning here is that if you do manage to put the chip in incorrectly you'll damage it, so Figure 4 shows that pin 1 is at the bottom right. In effect the chip is in upside down.



◀ **Use this diagram to locate the cuts in the stripboard tracks corrrectly**

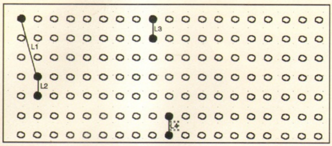


Figure 3.

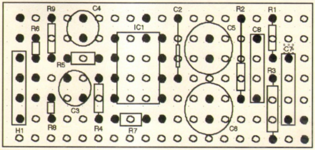


Figure 4.

Parts List

	Quan	Description	Order no:
1	CDDA Header socket	YW11M	0.42
1	LM387N Dual Pre-amp	UJ38R	1.29
2	4R7 1/4W Resistor	M4R7	0.05
1	1R1/4W Resistor	M1R	0.05
2	47K 1/4W Resistor	M47K	0.04
2	1K2 1/4W Resistor	M1K2	0.04
2	100R 1/4W Resistor	M100R	0.04
1	100NF Polyester disc	YR75	0.18
2	100uF 16V Electrolytic	AT40T	0.10
2	470uF 16V Electrolytic	AT43W	0.16
2	100NF 16V Polyester layer	WW41U	0.27
1	Stripboard	JP47	1.52
		(Optional)	
1	3.5mm Stereo line	RK51F	0.55
1	each Phono plug	FJ88W/9W	0.32
1m	Coax cable	XR21X	0.39
10m	Power cable Black	BL00A	0.59
10m	Power cable Red	BL07H	0.59
1	Enclosure	FK73Q	1.21
Total Cost			£8.83

Step 5: connections

You now have a finished circuit board. This brings us to adding the cabling so that we can plug the different bits in. This is where the setup specific differences come into play. On our version I opted to bring the Amiga audio in on phono leads.

This is not too bad on a Zorro'd Amiga as there are always ways of geting cables in and out. If you are thinking of using this on an Amiga 1200 with an external CD-ROM then you'll have to make up the leads to suit your type of setup. If all else fails you could opt to solder straight onto the back of the audio sockets from inside the machine. Although possible, it is extremely fiddly and involves heat on a lot of components very local to the sockets. Use it as a last resort.

So our master has phono leads to bring the audio back into the machine, and it has a 3.5mm stereo socket on a lead for the PC-type speakers to be plugged into. This again depends on how you have your audio connected up. You could always wire up two phono sockets on the outputs to replace the originals.

These cables should be made from sheathed coaxial cable to give a good earth screen around the in/out cables. This helps to cut down on the electrical noise from inside the computer. Things like disk drives, hard drives etc can sometimes interfere, and a good screening will eliminate some of this.

The power is taken from the 12V lines running out of the power supply. The easiest way to tap into these would be to find a vacant power connector. The connector for hard disks has the power we need. Two lengths of cable, one red and one black, should be used for this and are connected up as in Figure 5. Here we show a hard disk connector but a spare floppy drive connector would do just as well. In fact, if you have a multimeter, you can take a 12VDC supply from pretty much anywhere you can find one.

Step 6: testing...

Just to be on the safe side, it's nice to be able to check that things are looking alright before proceeding. Using your multimeter, check the Amiga audio input pins for a resistance. If all is well, you should have about 2.5K across the two inputs and a reading of at least 500 Ohms from each one to earth.

Repeat the process for the CDDA socket, checking first the left and right together. Is it greater than 150 Ohms? Good. The last thing is to measure the value across the outputs. This should typically be high, at least 50K, but don't worry about being exactly as specified. Different component tolerances will affect these readings.

Step 7: kick it

Right, what are you waiting for? If you've got this far, let's plug it all in and try it out. You'll need some software to play an audio CD and examples are on all CUCDs. So get Ken and Barbie in that drive and crank it up. It was worth it, wasn't it? ■

Simon Archer

ard. This
that we
s where
e into
g the

Amiga as
bles in
this on
-ROM
ds to suit
ou could
of the
ine.
ddly and
ts very
resort.
to bring
d it has a
the PC-
his again
lio con-
p two
place the

om
od earth
is helps
from
k drives,
fere, and
e of this.
lines
e easiest
nd a
ctor for
Two
lack,
nected
ard disk
onnector
have a
upply
find

ice to be
alright
meter,
r a resis-
about
ding of
earth.
socket,
her. Is it
ast thing
utputs.
50K,
s speci-
will

you''ve
t out.
audio
So get
k it up.

New! The Eyetech Complete Guide to Towering your A1200

Do-it-yourself EZ-Tower kits; Mk 2 EZ-Tower assembly; Keyboards and keyboard adapters; High density floppies; 100MB+ cartridge drives; Multiple IDE/ATAPI devices; Zorro slots; High-res graphics cards and scan doublers; PC-Pentium slave boards; Amiga-PC Networking & Integration; Port exp'n.

Do-it-Yourself EZ-Tower

If you are confident about undertaking a small amount of metalwork using hand tools then this is your lowest cost route to a really professional A1200 Tower system - capable of all the other expansion opportunities oulined on this page.

To build your D-I-Y EZ-Tower you will need to:

- √ Remove the back panel of the supplied PC tower by drilling out the aluminium pop-rivets
- √ Remove a section of internal shelving by making three short hacksaw cuts
- √ Trim down a removable plate using metal shears or a hacksaw and deburr any sharp edges with a file
- √ Fasten the custom back panel back in place using the screws provided or your own pop rivets.
- √ Clip the A1200 power adapter on to the PSU cables using a pair of pliers and the Scotchlock (squeeze-type) cable joiners provided.

Thats it! You've just saved yourself £20 for around 20 minutes work.

The Eyetech *DIY EZ-Tower* costs just *£99.95* - including all the components supplied with the ready-built *Mk2 EZ-Tower*.

The *DIY EZ-Tower* is also available to non-UK customers *without the PC tower* FOR EXPORT ONLY at £49.95 inc VAT @17.5%

Floppy drive and backup options

Bear in mind that you should ***always*** have a bootable floppy drive connected to the internal floppy drive 34-pin header as this may be the only way to boot your computer in an emergency. (Catweasel, Diskplus etc are not bootable)

Your DF0: options are:

- √ Use your old drive with the faceplate & extension cable supplied
- √ Use Eyetechs ***EZ-DF0*** adapter - £14.95, or £34.95 complete with new ***Sony*** floppy drive mechanism with built-in faceplate.

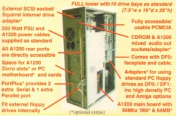
Backup and high density floppy drive options:

- √ Mount your external floppy in the EZ-Tower as DF1. (Its lead must be at least 70cm or you'll need a ***50cm extension cable*** - £12.95)
- √ Use a ***DiskPlus*** interface (you can still use 4 drives on the IDE port - Catweasel doesn't allow this) for DD/HD/XHD Amiga/PC disks
- √ Use an ***Eyetech LS120*** drive* on the IDE port. Reads & writes PC format 720KB/1.44MB diskettes & ***120MB superdisks*** (£14.95/1 or £34.95/3)
- √ Use an ***Eyetech IDE Zip*** drive* for standard data interchange with PC's, Mac's (supported by Shapeshifter) and other Amigas.

** Eyetech EZ-IDE software required*

The All-New Eyetech EZ-TOWER

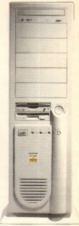
"This definitely one of the easiest solutions to building your own tower." Amiga Format - July 1997
"The Eyetech tower offers clever solutions with a Velcro easyfit mentality" Cu Amiga - Oct 1997


FULL tower with 10 drive bays as standard (7.5"w x 16"d x 26"h)
External SCSI socket/ Squirrel internal drive adapter*
250 Watt PSU and A1200 power cables supplied as standard
All A1200 rear ports are directly accessible
Space for A1200 Zorro slots* or PC motherboard* and cards
PortPlus* provides 2 extra Serial & 1 extra Parallel port
Fit external floppy drives internally
Fully accessible/ usable PCMCIA
CDROM & A1200 mixed audio out sockets/adapter*
Comes with DF0: faceplate and cable.
Adapters* for using standard PC floppy drives as DF0: / DF1: inc high density PC and Amiga options
A1200 main board with 66Mhz '060* & 64MB*
(*optional extras)

It Couldn't be Easier!

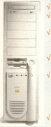
- √ Remove the case top and keyboard ribbon cable *(No shield removal required).*
- √ Slot in the ribbon cable from the optional PC/ Amiga keyboard interface.
- √ Mount existing and new hard and floppy drives and CDROM units in the bays using the screws provided.
- √ Connect up the drives power and data cables.
- √ Clip the A1200 motherboard/base into the custom backpanel.
- √ Push on the power/HD/FDD LED adapter and the A1200 power connector.
- √ Put back the outer case. Thats it! ...

Now You've Got Tower Power!



The A1200 EZ-Tower

A fabulous, time-limited EZ-Tower System offer from Eyetech!!!*



- √ ***Ready built EZ-Tower*** with 250w PSU
- √ ***EZ-Key*** keyboard adapter, ***Windows95 keyboard.***
- √ ***Full UK specification A1200, Kickstart 3.1/Workbench 3.1*** disks, manuals, mouse, mousemat and TV lead.
- √ ***880KB Sony floppy drive*** including faceplate and ***EZ-DF0*** interface
- √ Fantastic software bundle including ***Wordworth 4SE, Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz***
- √ All items fully installed, tested and ready-to-go!

Complete EZ-Tower floppy system as described left (component price £495) for
Just £349.95

Why not have these upgrades installed *at time of purchase only* at the following very special prices:

- √ ***1.2GB*** TowerDrive and cable for ***Just £79.95***
- √ ***Apollo '030/33MHz accelerator with MMU, FPU*** and ***8MB*** memory for ***Just £89.95***

* Prices in this box are not valid in conjunction with any other offer from Eyetech

What about PowerPC upgrades?

The Blizzard PowerPC boards from phase5 will fit in the trapdoor space of an EZ-Tower'd A1200, with or without a Zorro expansion board. However you should bear in mind that the PPC boards will be limited to providing 'subroutine' support to specially written 680x0 programs (just like an expensive FPU) for the forseeable future. If and when a proper native PPC Amiga operating system is available Eyetech will start stocking and supporting these boards directly.

All EZ-Towers ...

...feature a slide-out mounting frame for fitting either ...

...a standard PC motherboard and cards, or...

...a Zorro board and cards (as well as your A1200).

Looking for an all-in-one package? Why not treat yourself to the Eyetech EZ-Tower Professional Pack?

Just look what you get for an unbelievable £799.95!

The Eyetech Professional pack comes with a full EZ-Tower, new WB3.1 A1200 and ...

EZ-KEY & Win95 k/b,

25MHz '040 & 16MB fast RAM,

8x CDROM, 1.7 GB HD, EZ-IDE s/w & 4-way EIDE i/f .

The optional LS120 120MB Superfloppy

- √ ***EZ-Tower*** with full UK specification A1200, ***Kickstart 3.1/Workbench 3.1*** disks and manuals, mouse, mousemat, TV lead and 250watt psu.
- √ ***EZ-Key*** keyboard adapter, ***Windows95 keyboard.***
- √ ***25MHz '040*** processor (approx 19 Mips) with MMU & FPU and ***16MB*** of program memory.
- √ ***1.7GB TowerDrive*** with Workbench 3.1 and shareware utilities preinstalled
- √ ***8-speed CDROM*** including the ***Eyetech 4-device buffered interface*** with ***fully registered EZ-IDE*** CDROM/hard drive/IDE Zip drive/LS120 driver software (see main ad for EZ-IDE details)
- √ ***880KB floppy drive*** including faceplate
- √ Fantastic software bundle including ***Wordworth 4SE, Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz***
- √ All items fully installed, tested and ready-to-go!

AND the option to have:

- √ An ***LS120*** 720KB/1.44MB/120MB super floppy drive/cable installed in your machine for ***just £89.95 extra*** (at time of purchase only)

Graphics cards, scan-doublers and the single-slot Zorro option

The Eyetech single slot Zorro adapter fits close to the A1200 main board allowing a PC motherboard and selected PC cards to be fitted simultaneously. It has primarily been designed for use with Amiga Graphics cards such as the Cybergraphics 64/3D from phase5. Please note that as there is no practical, reliable way to abstract the video signals present on the A4000 Zorro video slot from an A1200 (without soldering onto the main board) you cannot successfully use the built-in/optional scan doublers on the Picasso IV or Cybervision64/3D boards with any add-on A1200 Zorro adapters.

To overcome this limitation Eyetech has produced two plug-in adapters which can be used either individually or together - depending on your existing monitor's scanning capabilities.

The ***AUTO-MON*** adapter works in conjunction with the Cybervision 64/3D card to automatically display the output of your current program whether retargetted to the CV64/3D card or displayed via the AGA chipset. If you have an Amiga-compatible multisync monitor the *AUTO-MON* is all you need for seemless use of your Amiga.

The ***EZ-VGA*** adapter is an external unit that attaches to the 23-pin video socket of any Amiga and automatically scan-doubles any 15Khz screen mode signals so that they display correctly on a normal PC SVGA monitor. PC-compatible screen mode signals (DBLPAL, Productivity, Super72 etc) are passed through unaltered.

AUTO-MON adapter £39.95
EZ-VGA adapter £79.95

Love your A1200 but need PC compatibility for work or study purposes? Then you need Eyetechs EZPC-Tower system for your A1200.

Just £899.95 gets you a ready-to-run system with:

- √ A full Amiga EZ-Tower system ready to take your A1200.
- √ Jumperless 266MHz-capable 'TX' PC Pentium board with 166Mhz cpu, 32MB of memory, Windows 95 keyboard, mouse and Windows 95 operating system.
- √ High performance, high res graphics card with full screen/full frame rate MPEG playback (with sound).
- √ 32-voice high performance sound card with direct-to-disk, CD-quality recording software.
- √ 1.7GB hard drive, 16-speed CDROM, 2 x serial, 1x parallel ports and 1.44MB high density floppy drive.

AND either the Eyetech *EZ-PC* integration pack:

- √ The Eyetech ***EZ-VGA*** compact, external Amiga scan-doubler to display 15KHz modes - eg games - on a PC SVGA monitor.
- √ **PC-Amiga networking software** which allows all PC side hard drives, floppy drives, CDROM drives and networked drives to be read from and written to by the Amiga, including cable.
- √ The Eyetech ***EZ-Key*** PC keyboard adapter for the Amiga
- √ A remote desktop switchbox to flip monitor and keyboard between the PC and Amiga sides

OR the Eyetech *Siamese* pack (additional £99.95):

- √ The full **Siamese system version 2.5** software including retargetable graphics.
- √ The Eyetech ***EZ-VGA*** compact, external Amiga scan-doubler to display 15KHz modes - eg games - on a PC SVGA monitor)
- √ The Eyetech ***EZ-Key*** PC keyboard adapter for the Amiga
- √ The ***AUTO-MON*** automatic monitor switch to display either the PC graphics card output (including retargetted Amiga screens) or the scan-doubled Amiga output for Amiga screens - such as games - which will not retarget onto the PC display

The EZ-Tower has great accessibility!

Just undo 5 screws to remove the back and side panels. Another 4 screws and the PSU can be removed to allow you fully access the A1200 board.

EZ-Tower Pricing Information

Code	Description	Price £	Code	Description	Price £
EZ-Tower cases , systems, keyboards & accessories			*Zorro adapters, graphics cards, LS120 & floppy drives*		
CASE-FT-1200	EZ-Tower case	119.95	ADPT-Z2-A12/1	1-slot Zorro 2 adapter	99.95
CASE-FT-KIT	EZ-Tower DIY option	99.95	ADPT-Z2-A12/7	7-slot Zorro 2 adapter	179.95
CASE-FT-EXKT	EZ-Tower DIY no PC case	49.95	ADPT-Z2-KBUG	EZ-KEY upgrade for Z2 adp	35.00
A12-MGK-EZTW	EZ-Tower w/ A1200 system	799.95	GFX-CV643D	Cybergraphics 4MB Z2 card	159.95
APC-CF1-EZTW	EZ-Tower w/ Pent PC syst	899.95	GFX-MONSW-AUT	AUTO-MON switch for CV643D	39.95
APC-SIA-UG	Siamese upgrade for abve	99.95	ADPT-GFX-SDBL	EZ-VGA 23p in-line scandbl	79.95
KBD-A4000	A4000 k/b intl 6p minidin	39.95	INT-12I-CD4	4-dev EIDE buff interface	39.95
ADPT-KBD-6P5P	6-pin mini to 5 pin adptr	6.95	DVR-EZIDE	Univ'l IDE/ATAPI dvr/enhan	34.95
KBD-WIN95	Win95 kbd 5p EZKEY compat	19.95	DVR-EZIDE-SP	EZIDE w/ INT-12I-CD4/LS120	17.50
ADPT-KBD-1200	EZ-KEY auto Amiga/PC 5pin	39.95	HD3-LS120	ATAPI 0.72/1.44/120MB FDD	99.95
ADPT-AUD-EZTW	Audio mixer Amiga/CD RCA	19.95	HD3-LS120-CT3	3 x 120 MB superfloppies	34.95
ADPT-SCS-EZTW	Squirrel int/ext SCSI adp	19.95	INT-12C-DSKPL	DiskPlus FDD i/f DD/HD/XHD	69.95
ADPT-DF0-TWR	Floppy extn cab & faceplt	12.95	INT-Z2-IDEPL	6xIDE(exp->10)+DD/HD/XHD FD	79.95
ADPT-DF0-FP	Int floppy drive faceplat	6.95	INT-SER-PPL	2 x 460Kbaud S + 800KB/s P	89.95
INT-FDD-DF0	EZ-DF0 Sony PC FDD i/f DF0	14.95	INT-SER-PJR	1 x 460Kbaud highspeed ser	46.95
FDD-INT-DRINT	Sony FDD w/faceplate/EZDF0	34.95	ADPT-HD-2/3	2.5"HD->3.5" bay & cab adap	12.95
PLUG-IEC	Rewirable PSU outlet plug	4.95	CAB44-2W-60C	2.5"HD 60cm cab 44-44 way	19.95

Eyetech Group Ltd
The Old Bank, 12 West Green,
Stokesley, N Yorks, TS9 5BB, UK

Tel UK: 07000 4 AMIGA
01642 713 185
Tel Int'l: +44 1642 713 185
Fax: +44 1642 713 634
eyetech@cix.co.uk
www.eyetech.co.uk

Voted AUI Amiga Company of the Year 1996/7

EYETECH

Next Day delivery to EC and USA/Canada. Worldwide deliveries in 2-7 days from receipt of faxed order and payment details. (eg SX32 next day to NYC £25.30)

UK m'land next day insured del'y charges: S/w, cables, buffered i/f £3; 2.5" drives, accel's mem boards £6; manuals £7; 3.5" drives, modems, psu's £9.50; Twrs, CD+ (2day)£10 ***Ring/fax/email for other delivery costs***

UK bank/building society cheques, Visa*, Mastercard*, Switch, Delta, Connect, Postal/ Money orders accepted. * A 3% surcharge is applicable to all credit card orders. Due to space limitations some of the specs given are indicitive only - please ring/write for further details. **Please check prices, specs and availability before ordering. If ordering by post please include a contact phone no.** Goods are not supplied on a trial basis. E&OE. All prices include VAT at 17.5%. VAT is not applicable to non-EC orders

AWeb II

Surf the Web on your Amiga! AWeb is a fully featured web browser

£29.95

Art Effect

ArtEffect uses the same concepts as industry standard Art packages and brings them to the Amiga. V2.0 now has Layers and Virtual Memory! The ArtEffect range can be further improved with the addition of add-on modules.

ArtEffect V1.5	£ 59.95
Art Effect V2.0	£119.95

Storm C

StormC V3.0 Base Package Non Commercial license	£119.95
StormC V3.0 Base Package Professional unrestricted license	£179.95
StormPowerASM V3.0	£ 99.95
StormWIZARD V2.0 – GUI creation	£ 69.95

Add-on Modules (All require Storm C base package)

StormC V3.0 - p.OS-Module	£ 49.95
StormC V3.0 - PowerUp-Module	£119.95
StormC V3.0 - PowerASM-Module	£ 69.95

(Call for upgrades for any of these packages)

Picture Manager Pro

All-in-one graphics tool for automatic picture organisation, format conversion, searching, printing, image processing, PhotoCD access and more!

Picture Manager Professional V4	£39.95

Fusion

FUSION – The ultimate Software Mac Emulation

Runs practically all the latest Mac software. Latest System 8.0 support! (Macintosh ROM's required)
Why consider buying a Mac when the Amiga can do it for you (at a fraction of the cost)

FUSION

£ 49.95

Tornado 3D

Tornado 3D is a superb new Rendering and Animation package. Many advanced features!

£179.95

MasterISO V2

MasterISO Version 2 is an advanced CD-R/RW system with an excellent new interface. Now with Track-at-Once and Disk-at-Once support, CD-Re-Writable support and full pre-use system evaluation checks. Advanced Write manager and Audio manager functions are also included.

MasterISO V2.0	£ 59.95

AsimCDFS

AsimCDFS - CD-ROM Reading software integrates CD-ROM technology into the Amiga operating system. AsimCDFS consists of AsimTunes, AsimCDFS, CDTV and CD32 emulation modules, FishMarket and a Preferences Editor. It provides access to ISO 9660, HighSierra, Rock Ridge and Macintosh HFS CD-ROM formats and supports SCSI CD-ROM drives (most SCSI controllers) and ATAPI CD-ROM drives on the A1200 and A4000.

AsimCDFS	£ 49.95

Catweasel II

The new Catweasel II controller fits both the A1200 and A4000. By utilising cheap PC 3.5" and 5.25" drives, Catweasel provides fast support for Amiga 880Kb/1.76Mb, MS-DOS 720Kb/1.44Mb/1.6Mb, Mac 800Kb/1.44Mb, Atari 10/11 sector, Commodore 1581,1541, Atari 800XL, Apple IIe and other disk formats. Supported by Fusion and PCx.

Catweasel II	£ 49.95
Catweasel II Zorro (also includes buffered IDE)	£ 69.95
Buddha Four IDE devices for the A4000	£ 44.95

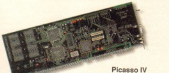
PCx

PCx Advanced software only 80x86 PC emulation.

PCx

£ 49.9

Picasso IV



Picasso IV
Without doubt the most stunning graphics card yet for the Amiga. No wonde CU Amiga claimed this to be "The God of Amiga Graphics Cards!"

Integrated flicker fixer, 4Mb EDO RAM, Autosense Zorro II or Zorro III

£249.9

Concierto IV

The Concierto is a 16-bit Sound module for the Picasso IV.

It's Yamaha OPL3 synthesiz supports 18 voices and digi playback and recording in mo and stereo. The Concierto boa two Midi connectors , AHI driv MIDI driver, Concierto Mixe Serial driver and ARexx support requires PicassoIV (firmware 4.1 or higher), Zorro/ISA mou for the I/O connectors, 68020 CPU or better (faster process for optimum performance) and OS 2.04 or better.

Concierto IV	£ 99.95

Pablo IV

Pablo IV is the video encoder module for the Picasso IV. The encoded signal is suitable for use with VCRs, televisio sets and studio equipment, providing S-VHS or CVB (Composite) video mode Displays 640x480 an 800x600 (PAL B/G/I mod only). A time base corrector required for use with a ge lock. Requires a Picasso (firmware 4.1 or higher)

Pablo IV	£ 69.95

Paloma IV

The Paloma TV module has two video-in channels for th reception of S-VHS and VHF/UHF (aerial) signals. It als generates video images on the Amiga workbench. All T images are displayed in a 24-bit window, and pictures can b saved and edited. The captured signal can be combined wi computer generated graphic The result can then be fed into th Pablo II thus producing a digit genlock.

Paloma IV	£ 99.95

Monitor Adaptor (23-pin mon. to 15-pin gfx)	£ 14.95
VGA Adaptor (23-pin Amiga to 15-pin mon.)	£ 14.95
Floppy Drive 1.76Mb int. (1200/4000 1" high)	£ 54.95
Floppy Drive 1.76Mb Ext. (No patch!)	£ 59.95
PC Keyboard interface for 1200 Desktop	£ 39.95
PC Keyboard interface for 1200 Tower	£ 39.95
PC Keyboard interface for 4000	£ 34.95

8 Mb 72-pin SIMM RAM	£ 24.95
16Mb 72-pin SIMM RAM	£ 44.95
32Mb 72-pin SIMM RAM	£ 79.95
1.7Gb IDE Hard Drive	£129.95
2.1Gb IDE Hard Drive	£149.95
3.2Gb IDE Hard Drive	£179.95

8X IDE CD-ROM	£ 49.95
24X IDE CD-ROM	£ 69.95
IDEFix 97 - Buffered A1200 4-Way IDE I/F Includes registered Atapi software	£ 34.95

All Drives and CD-ROMs are bare units. Prices may fluctuate on Hard drives/RAM.CD-ROM units.

tion.

£ 49.95

/
ost stunning
a. No wonder
f Amiga

£249.95

V

Picasso IV.

3 synthesize
es and digita
rding in mon
ncierto boasts
rs , AHI driver
cierto Mixer
lexx support.
rro/ISA moun
ster processo
er.

£ 99.95

casso IV.
CRs, television
HS or CVBS
ideo modes
0x480 and
B/G/I mode
se corrector i
e with a gen-
a PicassoIV
higher)

£ 69.95

annels for the
gnals. It also
bench. All TV
ictures can be
combined with
ed graphics
be fed into the
cing a digita

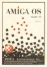
£ 99.95

£ 49.95
£ 69.95

£ 34.95

rices may
hits.

Amiga OS 3.1



OS3.1 – Official Amiga OS Upgrade

Amiga 500, Amiga 500+, Amiga 1500, Amiga 2000	£ 39.95
Amiga 1200, Amiga 3000(T), Amiga 4000 (T)	£ 45.95

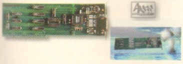
OS 3.1 ROM's only

Amiga 500, Amiga 500+, Amiga 1500, Amiga 2000	£ 25.95
Amiga 1200, Amiga 3000 (Inc. Tower), Amiga 4000 (Inc. Tower)	£ 29.95

Prelude

Prelude

Zorro II 16-bit sound card with full AHI software support. £169.95



Genlock/DigiPen

MG10 Genlock

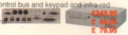
Supports VHS, VHS-C, Video-8 formats with precise settings of contrast, brightness and colour. Invert functions (i.e. Keyhole effects) and soft fading. £169.95

MG25 Genlock

All the functions of the MG-10 plus RGB Monitor switch, separate RGB colour setting, S-VHS, Video-8, Hi-8 and Alpha-Channel bypass. £249.95

BX Genlock

All the functions of the MG-25 plus Picture-in-Picture, Standby. External device control bus and keypad and infra-red



control support	£349.95
Infra-red remote control	£ 49.95
Keypad (100 keys)	£ 79.95

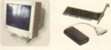
DigiPens

DigiPen 606 (15.24 x 15.24 cm)	£ 89.95
DigiPen 906 (22.86 x 15.24 cm)	£109.95
DigiPen 1212 (30.48 x 30.48 cm)	£129.95

Scandoubler/Monitor

Use high quality PC monitors with your Amiga.

Internal A1200 Scandoubler (Desktop/Tower)	£ 64.95
Internal Scandoubler (requires video slot)	£ 69.95
External Scandoubler (Any Amiga)	£ 79.95
14" Digital Monitor	£139.95
15" Digital Monitor	£179.95
17" Digital Monitor	£339.95



Ariadne Network

Fast Amiga networking. Zorro II card with additional parallel ports. Comes complete with Envoy software.
£129.95

Amiga Computers and Towers

Infinitiv Amiga Tower Sytems
Officially licensed Amiga computers.

Infinitiv 1300
Infinitiv Tower, A1200 Motherboard, OS3.1, 200W PSU, Mouse, External Amiga Keyboard, Floppy drive. £349.95

Infinitiv 1400
As per 1300 above plus 5 x Zorro II, 2 x ISA, 2 x PCI and Video option. £499.95

Infinitiv 1500
As per 1300 above plus 5 x Zorro III, 1 x ISA, 2 x PCI, Video option, A4000 CPU slot and SCSI-II interface. £599.95

Infinitiv Kits-Z2

Tower with Z2 board	£249.95
Tower with Z2 board plus PSU	£279.95

Infinitiv Kits-Z3

Tower with Z3 board	£449.95
Tower with Z3 board plus PSU	£479.95

Component Parts

Infinitiv Tower + Keyboard interface	£129.95
Infinitiv Tower + K/B int. + PSU	£159.95
Z2 board: Zorro II x 5, PCI x 2, ISA x 2, Video (option)	£149.95
Z3 board: Zorro III x 5, PCI x 2, ISA x 2, Video (option), SCSI-II, A4000 CPU slot	£319.95

Infinitiv uprated PSU	£ 49.95
Infinitiv 3.5" "Snap-on" bay	£ 11.95
Infinitiv 5.25" "Snap-on" bay	£ 29.95
PCMCIA Angle Adaptor	£ 24.95
Infinitiv Video Slot Interface (State Z2 or Z3)	£ 39.95
Power Adaptor (for Non-Zorro Towers)	£ 6.95
External A1200 Keyboard case	£ 39.95
Windows 95 Keyboard	£ 19.95
Audio Slot Bezel (2 x Phono)	£ 19.95
1.76Mb Floppy drive (internal)	£ 54.95
CD-ROM Bezel	£ 4.95
IDE cable, 2.5" to 2 x 3.5"	£ 14.95
IDE cable, 2.5" to 2.5" + 3.5"	£ 14.95
3.5" device adaptor (Mount 3.5" in 5.25" bay)	£ 14.95

An extra 5.25" bay is required for any Infinitiv Zorro system if an A1200 accelerator is to be fitted. Additional hard drives/CD-ROMs will require extra cables. Both Z2 and Z3 boards require a Video slot interface to activate the video connector.

Tower Kits for the Desktop A4000 and A3000

Metal CE Approved Tower, Zorro III slots x 7, ISA slots x 5 (6 on 3000), Video x 2, (1 on 3000). PCI version has 3 x PCI and 3 x ISA

Tower 4000 PCI System (Tower and Zorro/PCI)	£339.95
Tower 4000 ISA System (Tower and Zorro/ISA)	£299.95
Zorro III/ISA/PCI/Vid (A4000 - board only)	£219.95
Zorro III/ISA/Video (A4000 - board only)	£179.95
Tower 3000 ISA System (Tower and Zorro)	£299.95
Zorro III/ISA/Video (A3000 - board only)	£179.95
Uprated PSU (state 3000 or 4000)	£ 69.95

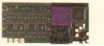
Accelerators - PPC and 68xxx

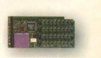
PowerPC 604e Accelerators for A3000/4000

CyberStorm PPC-604	180 MHz	200 MHz
Companion CPU Socket	040 or 060	040 or 060
Max RAM	128Mb	128Mb
SIMM Sockets	4	4
SCSI On-board	Ultra-Wide	Ultra-Wide
Price (No CPU - State 040 or 060)	£539.95	£619.95
Price with 68040/25 fitted	£569.95	£649.95
Price with 68060/50 fitted	£759.95	£849.95
Registered Upgrade Price	£499.95	£569.95

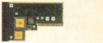
PowerPC 603e+ Accelerators for the A1200

Blizzard 603+	160 MHz	200MHz	250MHz
Companion CPU Socket	040 or 060	040 or 060	040 or 060
Max RAM	64Mb	64Mb	64Mb
SIMM Sockets	2	2	2
SCSI On-board	SCSI-II	SCSI-II	SCSI-II
Price (No CPU - State 040 or 060 socket)	£289.95	£374.95	£439.95
Price with Price with 68040/25 fitted	£339.95	£419.95	£489.95
Price with 68060 fitted	£519.95	£599.95	£659.95
Registered Upgrade Price	£259.95	£349.95	£409.95

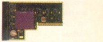




CYBERSTORM MKIII 68060 68060 Accelerator board for Amiga 3/4000 68060 CPU @ 50 MHz (66 MHz ready), Built-in Ultra-Wide SCSI (Requires SIMMs matching in pairs) £449.95



BLIZZARD 1230-IV 50 MHz 68030 Accelerator Board for the A1200 £ 94.95



BLIZZARD 1260 50 MHz 68060 Accelerator board for the A1200 £299.95

BLIZZARD SCSI SCSI-II Board for Blizzard 1230 or 1260 £ 59.95

Blittersoft

6 Drakes Mews, Crownhill Industry,
Milton Keynes. MK8 OER. UK.

Sales : +44 (0)1908 261466 (9.00am-5.00pm)
Tech : +44 (0)1908 261477 (1.00pm-4.00pm)
Fax : +44 (0)1908 261488
email : sales@blittersoft.com
technical@blittersoft.com
Web : http://www.blittersoft.com

Order by Access/Visa/Delta/Switch/P.Order/Cheque. 2% Surcharge on Access/Visa (not debit cards). All prices fully inclusive of VAT. Postage and Packing £7.00 + VAT (24 Hour) and £15.00 + VAT (Saturday). Prices and specifications may change without notice. Please telephone to confirm pricing/specification/availability before ordering. E&OE. All trademarks acknowledged. All orders subject to our terms and conditions of trading, available on request.

Trade enquiries welcome.

The Big Switch

No-one knows exactly what the future holds for the Amiga, but one thing we can be sure about is that it holds a change of CPU. We take a look into our crystal balls at the months ahead.

Since Amiga Inc. took on the job of bringing the now ageing Amiga hardware up to date, they have been faced with an unenviably huge range of opinions on what needs to be done. Just about the only universal theme they will have heard is the one we all know – the 680x0 must go. What exactly they should replace it with, by contrast, has probably been the subject of more differing opinions than anything else.

Since the inception of the Amiga line, Amigas have all been powered by a CPU (central processing unit) made by Motorola as part of their 68000 (68k) range. The 68000 was the pre-eminent chip of the early days of the 16 bit desktop revolution. Loosely related to the 6502 class processors used in the Commodore 64 and Apple 2, it was the obvious step up for computers such as the Apple Macintosh and Commodore Amiga that followed in their footsteps. 16 bit was a real buzz word, and the advantages to programmers of these processors was enormous. There were far more data registers than machine code programmers of the Commodore 64 days had been used to, and the instructions sets were more powerful. The 68000 ran at faster clock speeds and had twice the bus width for memory access of the older processors.

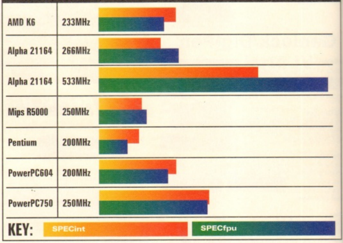
▲ **The AMD K6, a Pentium compatible Intel beater. Gateway are known to think highly of this chip, and it would give PC compatibility... but is this really an Amiga chip?**

No-one was going to let Motorola get away with winning the processor war, and before long the 7MHz 68000 in the A1000 and A500 was being rapidly overtaken. Motorola brought out new models in the processor family to match the opposition. The 68020 doubled bus width again to 32bits. The 68030 brought much improved architecture and manufacturing processes, allowing both greater efficiency and greater clock speeds, going up to 50MHz.

The 68040 integrated the floating point co-processor, a process which improved operation considerably. Changes to the instruction set allowed a few more boosts to performance. The 68060 refined the process even further, but never went above 50MHz in widely available form. Processors from other manufacturers have by contrast been developed so much further that it is increasingly difficult to buy a desktop processor running at less than 166MHz. Even the fastest 68k CPU is left trailing in the dust. Today AI are faced with the task of bringing the Amiga up to date, and first and foremost that means a CPU which runs at the kind of speeds other systems do. As there are no 68k series processors that run at those speeds, this means changing CPU. This isn't as simple as choosing one out of a catalogue and building the next Amiga around it, because it won't be compatible with old software.

The exact same problem faced Apple a few years ago. Having enjoyed a continuity of ownership the Amiga has not had, the infrastructure was in place to see the end of the 68k series of processors and plan for the future. The path that Apple took was for

How do the rivals compare?



The challengers: DEC Alpha

One of the leading choice for the next CPU has been the DEC Alpha processor, a high end 64 bit processor running at up to 600MHz. Normally used for high end workstation uses, it runs Windows NT and would certainly provide serious power.

Pros: Extremely fast, interesting multi OS potential. DEC's FX32 emulation allows 32 bit Windows code to be emulated very fast, although 16/32 bit software such as most Windows '95 programs won't run. Siamese Alpha has already bridged the gap.

Cons: No cheap version for low end models. Dubious future - Intel have bought into the Alpha technology, and commitments to development for five years isn't enough to ensure that the Alpha has a future as anything more than food for Pentium development.

● **Appropriateness: High** ● **Likelihood: Medium**

The challengers: Coldfire

Coldfire is a direct replacement for the 68k series of chips in embedded systems uses. It utilises a more modern architecture for better performance.

Pros: Very, very easy to port old software too. Very cheap.

Cons: Too slow, no high end models. Too much work for minimal gains. Not really designed for the job and misses to many features important to a next generation CPU.

● Appropriateness: Low ●Likelihood: Low

The challengers: 200MHz+ 68080

Mentioned by Petro Tyschtschenko at Cologne.

Pros: No incompatibility problems. All Amiga software would run at great speeds.

Cons: Doesn't exist. The current Architecture is not appropriate for these speeds anyway. This story was the result of a misunderstanding - Petro actually pointed out how much easier it would make life if such a thing existed.

● Appropriateness: Very high ● Likelihood: Not

them the easy one. Motorola hasn't been twiddling their thumbs since designing the 68060, they have been working on a new line of processors using a fundamentally different approach than the 68K series. These are the PowerPC chips.

The real advantage with PowerPC for Apple was exactly that it was the direct successor to the 68K series. Motorola wanted companies to move over to the PowerPC series, and offered a lot of help to anyone doing so. For Apple, the most important thing they offered was help in persuading a PowerPC chip to emulate 68000 processor, so that it could run old Macintosh software. Thus, when the first PowerMacs were released, they were able to run all the favourite old software packages that hadn't been converted.

Even with this emulation, the path from the 68040 Macs of the time to the PowerMacs was a rocky one. The early PowerMacs were fitted with a PPC601 processor running at around 66 MHz, a processor barely faster than a 68060. Even the high level of emulation Apple had developed didn't allow software to run on it as fast as it did on the top of the line 68040 Macs.

It was only when the first few pieces of PowerPC specific software came out and ran much faster than the 68K versions did on the fastest 40MHz 68040 Mac Quadra that people really started to see the advantage. Now with the arrival of PowerPC chips in the much improved 603, 604 and 750 classes being the norm for Macs, even that emulation goes quite fast enough.

The PowerPC chips are of course one of the front runners for the new Amiga CPU. There are plenty of dissenting voices out there, but the responses AI has had from developers around the world has shown a clear majority in favour of the PowerPC. Regular readers will know that CU Amiga has championed the PowerPC chip in this for some time now, and has had some flak on this in the past. I can assure you that no-one at CU Amiga is getting backhanders from Motorola, it is simply that from where we stand we can see better than most how urgent it is we get a new CPU, and how appropriate the PowerPC chip is for the job.

STATUS READY
MODE STANDBY
CPU SPD 200MHZ
RAM CHK
PHONES VOLUME
EJECT

▶ A concept render of the PowerPC based A\box, an Amiga like computer from PowerUp company phase5.

The idea of migrating the Amiga to PowerPC is not a new one. Petro Tyschtschenko, the president of Amiga International, has favoured the PowerPC for a long time, and put a lot of work into the project back in the Escom days. The ill-fated Walker was meant to be quickly followed by a PowerPC card developed in co-operation with phase 5, but the collapse of Escom scuppered that plan.

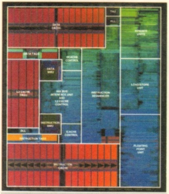
It is almost certainly the case that Motorola themselves have mooted the notion; there was a time when the Amiga was extremely important to them, and there is no doubt that they would have liked to see the Amiga convert along with the Mac. Perhaps most significantly, the PowerPC has the advantage over any other rival of actually being here already, and now that we are so far behind, we can't afford to start from scratch. Pios and phase 5 have shown the way with PowerPC developments, and whether you are an advocate of the PowerPC or not, you have to admit that having PowerPC Amigas here and now is the strongest argument of all.

I'm going to stick my neck out and say that AI almost certainly will pick the PowerPC as the next Amiga CPU. Alas there are more hard choices to come. In the unlikely eventuality that AI do opt for an alternative CPU, the same basic question has to be answered - how should it all work?

The obvious answer would to be to do exactly what Apple did and go completely over to PowerPC. Doing this would require two major pieces of software to be written, an Emulator and a backwardly compatible PowerPC version of the OS. Going this route would mean that all system legal Amiga software would run transparently on the new machines. A lot of 68K code would run rather unimpressively, but with the OS fully converted it shouldn't be a problem. New programs could be written in pure PowerPC

LIGHT MY FIRE.

◀ Phase5 have a next generation RISC processor for the Amiga already, the PowerPCchip and the Powerup project.



◀ Mask overlay for the ultra high end PowerPC 750 with schematic. This is the architecture which is evolving towards gigahertz speeds.

StrongARM™ Microprocessors
DIGITAL SEMICONDUCTOR SA-1100 StrongARM™
digital
SA-110 StrongARM™

◀ Distant outsiders the StrongARM, from the same stable as Alpha. Used in the British Acorn computers.

code and would have no bottlenecks in the system at all, allowing them to run at phenomenal speeds.

Interestingly for this approach, development of the emulation should be relatively straightforward, as Motorola have a lot of experience with the process. According to certain rumours, an early unstable 68K emulator that runs on the phase 5 PowerUp cards has been made. Unfortunately, re-writing the OS would be a major task, and one which would delay the process significantly.

phase 5 have come up with a simple but fool proof solution to the "legacy problem", the issue of retaining full compatibility with old software. Their PowerUp PowerPC boards are dual processor cards. That means that 68K code can be run efficiently on the 68K chip, and PowerPC code can be run efficiently on the PowerPC. The complexity of this is that the two processors have to share the memory and resources of the computer without getting in each others way. phase 5 wrote the ppc.library which allows the 68K CPU to communicate properly with the PowerPC and schedule resources correctly, but to confuse matters, Huge & Partner have release the rival WarpOS system.

The distribution of WarpOS has been controversial. Claim and counter claim from parties involved or otherwise has made the matter somewhat murky, but in essence Haage & Partner claimed that WarpOS did the job of the phase 5 ppc.library, only better. phase 5 inevitably disagree. According to some unbiased sources WarpOS is better, according to others ppc.library offers the best solution. In part the differences come down to the way that the mutliprocessing is done, but there are also some fundamental differences in opinion on the two approaches.

Advocates of WarpOS cite the availability of a specific Amiga Compiler, StormC, while followers of phase 5 point out that the GNU C++ compiler that will function with the ppc.library isn't an expensive commercial product. As for which is faster, no-one can say for sure right now.

It would seem likely that one of the major sources of disagreement is caused by differing notions of what is important. phase 5's approach seems to point towards their own future plans – they believe their solution is the only one that will allow the proper functioning of multiprocessor units utilising several PowerPC chips at once for blisteringly fast performance.

Their championing of the ELF hunk format, a UNIX standard rather than an Amiga one, was certainly made with more than half an eye to the development of their own "Amiga like" A\box, for which a Unix core has been specified. However it is certainly a more portable format than the more Amiga hunk format used by WarpOS, and allows the use of cross platform compilation. SAS/C for the PPC is also in development. Haage & Partner's solution by contrast requires the use of their own commercial compiler, StormC. It has gathered support from people currently most interested in getting PowerPC software running, and running very fast, as soon as possible.

H&P make a point of the ease with which StormC allows code cross compilation under WarpOS, and even showed a cross compilation of Quake running at impressive speeds on a PowerUp card. The interest in WarpOS may have been helped by the fact that Haage & Partner have been actively courting developers, whilst phase 5 have let the ball drop a bit lately on developer support, some registered developers complaining that they have not yet been given the latest versions of the ppc.library.

Fortunately this rivalry is not looking nearly as worrying as it was at first. phase 5 were notably and understandably upset when they learned that WarpOS and ppc.library tasks

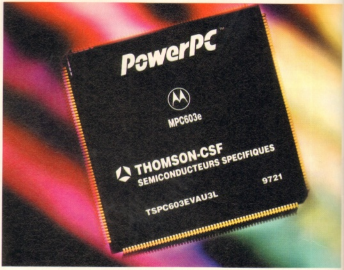
The challengers: Mips

A dark horse outsider, SGI Mips chips are used in everything from Nintendos up to the world's fastest computer, a 64 processor computer based on the R10000 processor running at an astonishing SPECint of 5704.

Pros: Good range of chips, low end models available at extremely good prices.

Cons: Not a popular choice, more purely graphics workstation oriented than all round desktop computing.

● Appropriateness: Medium ● Likelihood: Lowish



▶ A low end cheap but powerful PowerPC 603e as used in the A1200 PowerUp cards. This one is made by French semiconductor giant Thomson-CSF, one of three huge manufcturers making PPC chips.

68K ColdFire MICROPROCESSORS

The challengers: PPC

Follows the Motorola legacy. A continually developing line of processors central to Motorola's massive Semiconductor business.

Pros: Good range of models at reasonable prices. Ultra fast versions in the the 1 GHz region in development. Good 68K emulation. Perfect Mac emulation a major selling point. The most popular choice. PowerPC software and hardware already exists. Likely that a lot of support would come from Motorola. Apple may be moving away from PowerPC which may open opportunities.

Cons: Better price performance ratios do exist, Apple may be moving away from PowerPC which may limit opportunities.

● Appropriateness: Very high ● Likelihood: Very high

up to
proces-

rices.
an all

teringly

nk for-
Amiga
than half
own
core has
nly a
e Amiga
allows
on. SAS/C
Haage &
es the
ler,
m people
PowerPC
fast, as

th which
on under
compila-
speeds
WarpOS
hat
courting
the ball
rt, some
hat they
ersions

ing near-
e 5 were
hen they
tasks

---

could not be run without the machine being reset in between, but Haage & Partner tell us that this rather major bug has been fixed. Relations are improving between the two companies and there is no reason why it should not be left up to the developers which library they use, if the two libraries can happily work together. Of course if Amiga International step in and decide to go for PowerPC, they will be the ones who decide the fate of the two rivals. Several other companies looking into PowerPC cards have looked hard at the possibility of licensing WarpOS for their own projects, but if AI goes the multiprocessing route, they'll probably want to take on one of these solutions and make it official.

Even then, there are a lot of choices left. No-one wants the Amiga Market to fragment, but that is no reason why more than one CPU should get in on the act. Amiga software houses aren't going to write five versions of all their software, but a huge interest has been expressed in moving the Amiga to more than one CPU platform. This could be perfectly compatible with the notion of moving to PowerPC lock stock and barrel by doing this with a not dissimilar form of multiprocessing with some other CPU. This is in fact what we can already see in things like the excellent Siamese System which can integrate an Amiga with Pentium or Dec Alpha computers, and certain developments by Index Information, amongst others. Whatever the future holds for he Amiga's CPU of the future, you can be sure of one thing... it is going to be very fast! ■ **Andrew Korn**

The challengers: Pentium

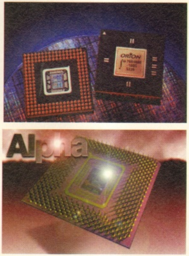
The processor behind the PC, much strengthened by the release of compatible rivals from AMD, Cyrix and Centaur which shave a lot off the price, and notably in the case of the AMD K6 which contains valuable technological advantages.

Pros: Very competitive prices, able to run Windows software for 100% PC compatibility.

Cons: Poor performance, limited clock speeds, quarter the number of registers available to programmers than most rivals, unpopular and a poor rate of instructions per clock cycle compared to modern fully RISC designs. An unpopular choice. Why not just make PC clones?

- **Appropriateness: Medium to Low**
- **Likelihood: Low**

▼ **Two nice meaty RISC CPUs with a lot going for them – Silicon Graphics MIPS and DEC Alpha.**



The challenger: Stalking horses

There are a number of other processors which have an outside chance. Processors such as the StrongARM, the HP-RISC, the Sun SPARC have their qualities and their proponents. The StrongARM, used in the current generation Acorn computers has a solid reputation but a dubious future for the same reason as the Alpha – it is made in conjunction with DEC. The HP-RISC has some extremely good engineering behind it but is at the end of its lifetime with the Intel/HP IA-64 to replace it, and the SPARC is rather firmly founded in the workstation market.

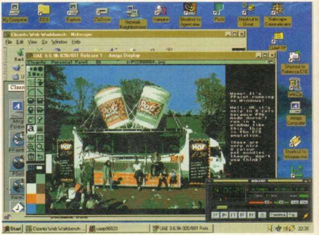
ENTERPRISE
INTERNET SOLUTIONS
gives your AMIGA® the World from £8* per month
In association with
ACTIVE
01624 677666
Technical Support: 01325 352260
http://www.enterprise.net
Corporate Solutions also available
Terms & conditions available on request
*£9.40 inc.VAT. No online charges
All trademarks recognised.

Amiga Forever

The title proclaims the intent: Amiga Forever! But will this commercial PC emulator for the Amiga ensure its survival or toll its doom? We take a look at the preview release.

■ **Price: £19.99, redeemable against full release**

■ **Publisher: Cloanto** ■ **Supplier: Weird Science ✆ +44 (0)116 246 3800**



Wooo! It's PPaint running on Windows!

Well, OK it's only in 8 cols because P96 mode doesn't run in a window like this. This is the ECS emulation.

Those are very nice 8 colour pot noodles though, don't you think?

You may well have heard of UAE, the Amiga emulator. It has wandered around in various forms for a while now, and has made it to PC, Unix and Mac. Emulation is normally considered one of the strong points of the Amiga, but emulation of the Amiga by other computers has been fraught with problems.

The Amiga uses a set of custom chips which complement the CPU. While an Amiga emulating a Mac need only emulate the code functionality of the Mac's CPU, an easy task given they use the same one, the MAC would have to emulate not only the Amiga's CPU, but all those custom chips as well.

Often cruelly termed the 'Unusable Amiga Emulator', UAE has until recently been good for playing ageing games at slow speeds. Three things have happened to change that. Firstly, the absurd power of modern CPUs mean that PCs are more capable of doing something like this.

Secondly, UAE Picasso '96 turned up offering the option of retargetting P96 screens onto the Windows native graphics system, which removes the major overhead of emulating the graphics chip set. Thirdly, Cloanto have picked up the product and are marketing it professionally.

Hot gossip

The announcement of the release of Amiga Forever caused some heated debate.

Cloanto have licensed the Amiga ROMs from Amiga International, so for the first time PC owners will be able to use Amiga emulation without pirating the OS. In some circles, this was considered tantamount to a betrayal, an admission that the Amiga is dead. After all though, isn't it dead systems that get emulated?

The answer when you think about it is of course not. We emulate Macs, they aren't dead. We emulate PCs, they certainly aren't dead. Emulation opens up new options to the users of an alternative computer, and surely it can't be a bad thing if all those PC users out there get a chance to try out an Amiga?

Cloanto have interesting plans for the future of Amiga Forever, and if you want a peek, you can – they've just released a preview CD. Although lots needs to be done to turn UAE into a polished product, there is quite a lot to look at already. Cloanto warn about preview is released ahead of schedule to satisfy the "... strong interest expressed by users after the original announcement of Amiga Forever..."

This basically means that the installation is hopelessly broken in this early release. I fail to see how gaping flaws with the installation were not addressed given Cloanto's normally superb standards of presentation.

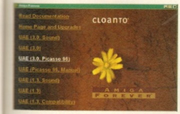
Luckily there's an update patch which makes the installation procedure work and quite frankly you'd be struggling, to say the least, without it. We got this just too late to put it on the cover CD, but expect it there next month.

> **"At the end of the day, the only people that will buy this product are ex-Amiga owners. Amiga Forever is no match for the real thing"**
> **Vince Pike, Epic Marketing.**

ROM key-file

After the patch, which is a new installer and Picasso 96 driver, Amiga Forever works properly and the emulator can be launched from the start-menu into various useful modes such as WinUAE, Picasso96 and WB 3.0 which is the most useful unless you're wanting to run old games. Unlike previous versions of UAE for DOS and Unix, WinUAE now has a front-end GU to set up the various options, a vast improvement over the convoluted command line switches needed in the past. Interestingly Amiga Forever requires specification of a 'ROM key file' as well as the Amiga ROMs. OS 1.1, 1.3 2.0 and 3.0 are provided but not 3.1. The ROM images are encrypted and useless for anything unless used with UAE and the RO key-file.

Another improvement in the latest WinUAE is that a PC directory can be specified as a hard drive – previously only disk



Amiga Forever

Read Documentation

Home Page and Upgrades

UAE (3.0, Sound)

UAE (3.0)

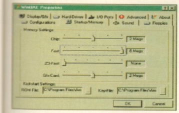
UAE (3.0, Picasso 96)

UAE (Picasso 96, Manual)

UAE (1.3, Sound)

UAE (1.3)

UAE (1.3, Compatibility)



WinUAE Properties

Memory Settings

Chip: 2 Megs

Fast: 8 Megs

Z3-Fast: None

Gfx Card: 2 Megs

Kickstart Settings

ROM File: C:\Program Files\Am

Key-File: C:\Program Files\Am

What does it support?

WinUAE also sports audio emulation although the AHI support isn't implemented yet. The author points out that there isn't a great deal of AHI support on the Amiga anyway and I have to agree it doesn't seem a priority. I/O support is quite comprehensive - Miami happily fired up and got a nice 115200 baud connection to an ISDN. Web browsers and IRC clients ran perfectly under Picasso 96 too.

Version 2 is due to have full parallel support for the Weird Science Network PC linkup cable, as well as ethernet options. What it most noticeably doesn't support is Amiga floppy disk drives, a fundamental hardware problem. Users of both platforms can use 720K discs and CrossDos, but others may have difficulties. Some concern has been voiced that this could lead to increased piracy. CD-ROMs can, of course, be read.

> **I believe in the networking possibilities more than I believe in the WinUAE emulation because it keeps people using their Amigas.**
> **Dave Law, Weird Science**

images and hard files (ala ShapeShifter) were accessible. This new method makes importing of Amiga files for WinUAE a complete doddle now that the PC can access the Amiga's drive. The hard drive directories that Amiga Forever installs are a stock (horrible) Workbench 3.0 set-up albeit with Picasso 96 installed for the native RTG.

Cloanto plan to remedy this with a nice well configured Workbench for version 2, and to this end we have forwarded them a copy of last month's Workbench 2000 feature! At least Personal Paint 7.1 is provided on the CD and, after the v1.1 patch, ran straight off with Picasso 96 emulation. Hooray, a proper paint package running on a PC! (Oh Cloanto, how about running ARexx as standard?)

Picasso 96

When running the Picasso 96 enabled version of WinUAE, the graphics go via the Picasso 96 RTG system to a UAEGFX monitor driver which hooks into WinUAE to provide native PC graphics drawing. Understand? You don't need to, the net result is that the display and overall emulation is a hell of a lot faster than before, but sadly the CPU emulation performance remains absolutely dire. Sysinfo reported 1.06 MIPs on my high end MD K6 225Mhz based PC.

Obviously without emulating the display chipset there's great room for improvement over this sloth like score, slower than an A1200 with fast memory. Certainly PC emulators running on the Amiga are a very great deal more efficient than this! The future of UAE has to involve canning custom chip emulation and more hooks for native 80x86 libraries and drivers for AmigaOS. Basically WinUAE faces all the same problems of AmigaOS taking advantage of a foreign CPU just like the PowerUp project.

Just as important as the display speed improvement, with Picasso 96 the colour depth was just like an Amiga graphics board rather than being limited to ECS' pathetic 16 colour 'hi-resolution' display. Yes folks, WinUAE only emulates an ECS chip-set, no loss with Picasso 96 however, since you get higher resolution and deeper colour depths than even AGA offers anyway. The ECS emulation is good enough that those old classic games will indeed play nicely on a nippy PC. Even the ultra-hacky demos will have a good go at running. It might only be ECS emulation but it's damn good ECS emulation. In fact I've used plenty worse real Amigas, certainly in the display department. One niggle, it would be nice to be able to run Picasso 96 emulation in a window rather than full screen, this is only possible with the ECS emulation.

An interesting thing to keep in mind is behind that rather poor emulated 68K virtual processor, there is a real processor trying to get out. This leaves the door open to the possibility of multiprocessing between the virtual 68000 and the Pentium chip beneath. The phase 5 PowerPC cards use this approach to get around the compatibility issue, and something similar could be done with Amiga Forever.

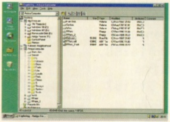
Plug in possibilities

There is no reason why you should not run Amiga software which has plug-ins operating on the Pentium side, and this is indeed what Cloanto have planned for the future. Just as they have released the PPC blitter plug ins for PPaint, they will in the future release one for the Pentium. Although you won't get the same advantage (the Pentium is already busy emulating 68K code while the PPC isn't doing anything unless you ask it) having at least part of the code running natively would offer a significant speed increase.

In theory this could lead on to more and more improvements. It should be possible to write more commonly called libraries in Pentium code to improve the performance of UAE. With a Pentium native version of Intuition and Exec, Amiga Forever would actually become quite a decent little system. One can't help wondering if Cloanto have half an eye on a sort of back door to porting Amiga OS to the PC. All this is speculation, however.

Amiga Forever is certainly a step in the right direction. The core functionality is certainly good enough to run a good Amiga system but the performance still needs improvements if it's going to tempt anyone to run applications on it full time. Cloanto promises much for the future though, including a TCP/IP stack interface to Windows, that means UAE can borrow the PC's internet connection too.

That'll be very handy, imagine AmFTP and Netscape on the same screen! If the future also holds performance improvements and Amiga Forever is provided with a half-decent Amiga system, we might have a real Amiga-on-a-CD which could gain the platform new users. Right now, it's a damn good try out. Time will tell if this route holds more in store for the Amiga. ■



◀ **Amiga Forever and the host of extra files... Windows 95 gets ready to run Workbench 3.0.**

> **It's no Amiga**
> **Joe Torre, Senior hardware Engineer, Amiga Inc.**

> **the only negative things I ever heard about Amiga Forever are about people who never saw it. I respect this, but I think that all users who have to use a PC at work, or a PC next to the Amiga at home, for example, deserve the same respect.**
> **Michaël Battilana, Cloanto**

EPIC Marketing

By supporting us, your supporting the Amiga.

OPENING HOURS
9:30am - 5:30pm
Mon - Sat
POSTAGE COSTS
£1 per title

UK orders
0500 131 486
or 0800 06 888 90

overseas orders
+44 1793 490988

general enquiries
0 1793 514188

fax line
0 1793 514187

email
epicmarketing@dialin.net

posted orders
Epic Marketing
Unit 22 - BSS House
Area 50, Cheney
Manor, Swindon,
Wilts, SN2 2PJ, UK

OPENING HOURS
ARVO - LATEpm
Mon - FRI
POSTAGE COSTS
$2 per title

Australian orders
02 9520 9606

posted orders
Epic Marketing
36 Forest Road,
Heathcote, NSW.
2233, Australia.

e-mail:
epic@swol.de
Telephone:
+49 0 7071 63525

German office
Epic - Paul Lechler
Strasse 4, 72076
Tubingen, Germany.

CREDIT CARD ORDERS WELCOME

All items are sold subject to our normal terms and conditions. E&OE
All prices include VAT. ^Supplied on floppy disk.
KS2/3 = Compatible with A500+/A600/A1200 etc

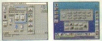
World of Clipart Plus is a double CD-ROM containing **40,000** mono and colour clipart images. It includes over **100 categories** including: animals, people, vehicles/transport, food&drink, zodiac, xmas, cartoon, music, computers, technology, babies, women, men, dogs, cats, birds, office equipment, trees and dozens more. Most clips are IFF.

Order: CD77x UK : £14.99 - AUST : $36

WORLD OF CLIPART *All Amiga's*

Magic Workbench Enhancer is a stylish Amiga CD-ROM containing not only Magic Workbench but also around *10,000 new Workbench Icons, Backdrops and Desktop tools*. Enhance Workbench even more with this excellent CD.

Includes:
Magic Workbench - 10,000 New Icons - WB Backdrops
Desktop tools - WB Sounds
WB Games - WB Hacks



Order: CD187x UK : £14.99 - AUST : $36

WORKBENCH ENHANCER *KS2/3*

The Speccy CD 1997 includes around 3,000 all-time classic original Spectrum games and emulators to run them on the Amiga. This CD is a sinch to use. The faster your Amiga, the better.

Order: CD403 UK : £14.99 - AUST : $30

THE SPECCY CD 1997 *Any*

The **Epic Collection 3** is a new Amiga CD containing around 600mb of the **very best Amiga software,** nearly all of it is usable directly from the CD. No need to decompress it to disk.

Order: CD405x UK : £14.99 - AUST : $30

THE EPIC COLLECTION 3 *KS2/3*

The new Ami-PC Linkup set is a powerful new **Amiga to PC Networking package** that allows the Amiga to have **access** to ALL of your PC's drives including: ZIP, Hard disk, Jazz, CD-ROM etc. Win'95 is recommended on your PC, but isn't essential. The package includes everything you need including cables..

*This software is **supplied free on an Amiga and PC floppy disks.** Call 0 1793 514188 for more info.*

Order: CD461 UK : £17.99 - AUST : $36 SPECIAL!

Ami-PC Linkup^ NEW *KS2/3*

Amiga Desktop Video CD volume 2 contains hundreds of megabytes of Video related backdrops, fonts, samples, and clip images. The CD also includes a **full version of Scala**.

Order: CD404x UK : £9.99 - AUST : $20

Amiga Desktop Video 2 *KS2/3*

ARCADE CLASSICS Plus

Order: CD76 UK : £14.99 - AUST : $30

Arcade Classics Plus includes hundreds of variations of all the classic arcade games, such as *Pacman, Invaders, Tron, Galaxians , Frogger, Tempest, C64 conversions, Q-Bert, Trail Blazer, Scramble, Ping-Pong, Pengo, Missile command, Breakout, Bezerk, Donkey Kong, Tetris* and tons more great games.

Breakout
Defender
Asteroids
Pacman
Tetris
Tempest
Galaxians
Invaders

Amiga CD-ROM GAMES

The Latest CD-ROM Titles!

CIVILIZATION
£14.99
SIXTH SENSE
£29.99
NEMAC IV
now £19.99
FLYIN' HIGH
now £19.99
TRAPPED
£14.99
BIG RED ADV
£19.99
WENDETTA
£19.99
STREET RACER
£14.99
Super Skidmarks+
£14.99
GLOOM 3
£14.99
Pinball B. Damage
£19.99
TRAPPED 2
£19.99

See our other advert elsewhere in this magazine for more great Amiga games.

HARD DISK PREP & INSTALLER^ - Allows you to partition your hard drive and install Workbench onto either a 2.5" or 3.5" hard drive. £7 (AHD7-2) for WB3 or (SHS7-2) for WB2.
SCANNER DRIVERS^ - Supports Epson GTxxxx, Hewlett Packard, Mirotek, Mustek, Highscreen flatbeds and more. *Some drivers require certain spec Amiga's.* £5 (SSD5-2)
ATAPI IDE SOFTWARE^ (ATP3-1)
Allows you to connect and run any standard PC IDE CD-ROM drive upto your Amiga. £3
ZAPPO / ARCOS CD-ROM DRIVERS^
The Latest Version 11.2 of the Zappo/Arcos driver software. £7 (AAZ7-2)
SOFT*MEM* SUITE^ - Soft*mem* makes your Amiga think it has tons of memory. It increases your memory to the desired amount. £5 (SMS5-1)
AMIGA PRINTER DRIVERS^ - Includes around 100 Printer drivers for use with Epson, HP, IBM, Star, Canon printers and more. £3 (DRV3-1)

AMIGA MOUSE & MAT
£12.95 + £1p&p
AMIGA JOYSTICKS
from just £9.99
MOUSEMAT
£3.99 in p&p
AMIGA XL TSHIRT
£10.99 + £1p&p
AMIGA MOUSE
£8.99 + £1 p&p

THE EPIC ENCYCLOPEDIA *AGA , 4mb, Harddisk*

Order: CD262x UK : £19.99 - AUST : $40

The Epic Interactive Encyclopedia is a completely updated product to the extent that it now includes around **16,000 subjects.** This version of the **Epic Interactive Encyclopedia** is available now. It features a superb new updated multimedia interface, hundreds of film clips, images, sound samples and subject information text. This version now supports a multitude of new features including: Colour images, Full-screen filmclips, National anthems and a unique ***Inter-ACT™*** feature which allows you to interact with certain subjects like: Draughts, etc. A superb reference and educational title for the whole family.

Features Include
16,000 articles *from Aachen to Zurich*
***Unique *Inter-ACT™* feature**
***Updated interface** *supporting colour images*
***Hundreds of film clips** *small and large*
***Over 4,000 images** *both b&w and colour*
***Dozens of new features**
***Music Styles** *from country music to rave*
***Updated Explorapedia** *now eight sections*
***Sound clips** *animals to famous speeches*
***National Anthems** *of dozens of countries*
***EURO-Pedia** *information on Europe*
***Sound montages** *styles of music, animals etc*
***Zoom into Animations** *4 times as large*
and much more.

AS SEEN ON TV
CU Amiga - 91%
Amiga User International - 90%
Amiga Computing - 90%
AMIGA SUPERSTAR

CD32 GAME
and A1200 with CD-R
Only £2.99 eac
(ONE FREE with every F

VITAL LIGHT
200 levels of sh
unadulterated a
gameplay. 1-2 p
(32-01)

LEGENDS
Two alien scien
have mischievou
elled back in tim
destroy earth. (3

MYTH
You are taken fa
time to confront
God Dameron.
Rated 96% (32-

Insight Dinosa
Is an amazing m
dia Dinosaur-ped
suitable for any
Amiga.(32-42)

MEAN ARENAS
It's fast, It's furio
slippery, It's Me
Areeenas!!! and
fun, fun. (32-25)

Marvins Marvel
Adventure
Ever delivered p
the far side of a
dimension? (32-

TOTAL CARNA
Level after level
ing, explosive, f
flame throwing f
(32-31)

Video Creator A
Create your own
ning music vide
to your music cd
(32-43)

John Barnes F
CD quality sou
effects, animate
crowds, Game r
arcade speed!!!

LAST NINJA 3
Ninja3 is here a
to explode onto
screen in this st
adventure beat'e

STRIP POT (18)
Imagine five of E
most beautiful g
your fingertips...
(32-37)

CHAOS ENGIN
During the last c
an experiment w
and space creat
bizarre machine.

ALFRED CHICK
This is no yolk. A
worlds only chic
a bionic beak, yo
to save the worl

LIBERATION (3
Enter the 29th C
and enter a dyin
commercially ex
by the corrupt s

Now that's wha
Games!
100 all time clas
games ready to
the CD32. (32-2

GLOBAL EFFE
Make the decisi
world leader, as
trol the balance
versus civilizatio

ALSO AVAILABLE....
02.Babba & Stix
03.Premier
07.Morph
08.Dangerous Streets
09.Akira
14.Guardian
15.Thomas' Pinball
19.Chuck Rock
26.Microcosm
28.Nick Faldo Golf
30.Sensible Soccer
32.Zool
33.Wing Commander
34.Oscar&Diggers
35.Fears
36.Thomas' Pinball
39.RoadKill
40.D-Generation
41.Whizz
Other titles available (Get a Ca

2 GAMES
00 with CD-RO
£2.99 each
E with every F

VITAL LIGHT
200 levels of shee
unadulterated add
gameplay. 1-2 pla
(32-01)

LEGENDS
Two alien scientis
have mischievous
elled back in time
destroy earth. (32

MYTH
You are taken far
time to confront th
God Dameron.
Rated 96% (32-2

Insight Dinosaur
Is an amazing mu
dia Dinosaur-**pedi**
suitable for any
Amiga.(32-42)

MEAN ARENAS
It's fast, It's furiou
slippery, It's Meee
Areeenas!!! and It
fun, fun. (32-25)

Marvins Marvello
Adventure
Ever delivered piz
the far side of and
dimension? (32-12

TOTAL CARNAG
Level after level o
ng, explosive, fan
lame throwing fu
(32-31)

Video Creator AG
Create your own s
ning music video
o your music cd's
32-43)

John Barnes Foo
CD quality sound
effects, animated
crowds, Game run
arcade speed!!! (3

LAST NINJA 3 (3
Ninja3 is here and
o explode onto yo
creen in this ston
dventure beat'em

STRIP POT (18)
magine five of Eu
most beautiful girls
our fingertips...
32-37)

CHAOS ENGINE
uring the last cen
n experiment with
nd space created
izarre machine. (3

LFRED CHICKE
his is no yolk. As
orlds only chicke
bionic beak, you
save the world.

IBERATION (32-
nter the 29th Cen
nd enter a dying
ommercially explo
the corrupt stat

ow that's what
ames!
0 all time classic
ames ready to u
e CD32. (32-29)

LOBAL EFFECT
ake the decision
orld leader, as yo
l the balance of
rsus civilization.

LE....

treets

all

olf
cer

nder
rs

all

ble (Get a Catalo

SixthSense Investigations is an amazing new Amiga arcade adventure, featuring 32 locations, full character dialog, 3 different worlds, many interactive characters, puzzles and more. This game sets new standards for Amiga gaming. Look for reviews!

Order: CD430 UK : £29.99 - AUST : $60

SixthSense Investigations
AGA

Here it is, what you've all been waiting for: A texture mapped 3D-racing game for the Amiga! Forget those boring "flat" 3D-racing games. Flyin' High allows you to drive over hills, through tunnels, over ski-jumps and a lot more. Up to 4 Players can play simultaneous by using a 4player Joystick-adaptor.
A Construction Kit may follow shortly!

System-requirements:
Amiga, KS3, 68020, AGA-Chipset, 4MB Fastram, Harddisk. - Fun starts on 68030 running with 30MHz.

Order: CD440 NEW PRICE! UK : £19.99 - AUST : $40

Flyin' High
6mb AGA Amiga

AGA Experience 3 is the latest collection of AGA tools, demos, graphics, games etc. This release contains 100% new material and will make a great addition to any A1200/A4000 owners CD-ROM collection.

Order: CD432x UK : £9.99 - AUST : $26

AGA Experience 3
AGA Amiga

UFO Encounters contains thousands of documents and images that "no-one" wants you to see. The CD covers all aspects of Abductions and UFO Sightings. Suitable for use on any Amiga.

Order: CD179 UK : £14.99 - AUST : $30

UFO Encounters
Any Amiga

Contains a wealth of software, *Including:* Workbench Games, Fonts, Textures, Clipart, Samples, Multimedia Backdrops, Music modules, Business Letters, Tetris Games, 3D Objects, Images, 3D Backdrops, Tools and more.

Order: CD449 UK : £19.99 - AUST : $40

Software EXPLOSION!
Any Amiga

Deluxe Paint as a product is the envy the the whole PC world, It's features and ease of use are not matched by any other graphics package either on the Amiga or PC. Deluxe Paint 5, the latest release, is no exception. Deluxe Paint 5 is without a doubt the fastest paint package available on the Amiga, It's unique palette feature supports virtually all the Amiga's graphics modes. Deluxe Paint 5 includes the most powerful yet simplest to use animation feature you could imagine. Direct support for all the Amiga's animation formats are included as well as of course the industry standard IFF picture format. *AVAILABLE ON DISK AND CD-ROM!*

Complete with on-disc manual as well as the never before published full printed manual.

Order: CD499 UK: £19.99 - AUST : $40 (quite heavy!)

Deluxe Paint 5
NEW KS2/3

Nathan Ludkin's MIDI GOLD is a professionally compiled collection of around 3000 MIDI files. Every MIDI track is categorised into various directories, like: Film, Composer/Artist, Style, etc.
Great with Yamaha XG System

CD492 UK : £29.99 - AUST : $60

MIDI GOLD
NEW Any Amiga

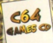
visit our new web site
www.globalnet.co.uk/~epic/
e-mail us
epicmarketing@dialin.net

^ Supplied on Floppy disk

The Games Room is an original compilation of Gambling games. It covers everything from Fruit Machines to Card Games, including Klondike, Poker, Solitaire, BlackJack, and Rummy, Roulette, Darts, Bingo, Pool, Checkers, Chess, Backgammon, Dominoes, Various Board Games like Monopoly and Cluedo, Mastermind, Pub Quiz's and a wealth of other Casino related games and far more than we can detail.

Order: CD451 UK : £12.99 - AUST : $26

The Games Room
KS 2/3



The re-compiled C64 Games CD includes around **15,000 all-time classic Commodore 64 games.** It's very easy to use and the CD has a complete index of every game.

Order: CD182 UK : £29.99 - AUST : $60

C64 GAMES ARCHIVE
KS2/3 2mb

3D Objects CD
2 CD's full of Sci-fi pix, animations, sounds etc. Rated over 90%
(CD215x) Only £7.99

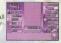
Anime Babes (18)
Thousands of high quality "adult" japanese images.
(CD191x) Only £14.99

Guiness Disc-Records
From the tallest man to the fastest car, It's all here on this great CD.
(CD45x) Only £10

Emulators Unlimited
Dozens of emulators from BBC, Mac, C64, Spectrum etc.
(CD117x) Only £14.99

SFX Sensation
Over 15,000 files. Includes sound effects from all over the place.
(CD165x) Only £9.99

The very latest 17BIT disks specially compiled by Quartz. All the best titles are here. Through an easy to use interface you have access to around 600 brand new Amiga disks all categorised into various themes.



Order: CD495 UK : £14.99 - AUST : $30

17BIT LEVEL 6
NEW KS2/3

Kid's Games
Suitable for any Amiga^
Only £3.75 each (minimum of 2)

POSTMAN PAT
COUNT DUCKULA 1 or 2
BULLY'S SPORTING DARTS
HUCKLEBERRY HOUND
POPEYE 2
POSTMAN PAT 3
THOMAS THE TANK ENGINE
THOMAS' FUN WITH WORDS
SOOTY'S FUN WITH NUMBERS
other titles available...

ADULT SPECIAL!

Order Adult Sensation One, Two and Three for just £20
or order them singularly for only £7.99 each

From Only £3
Great for xmas!

BARGAIN CD'S
KS2/3

Buy One, Buy them all, for five quid or under, your want even more!

Adult Mensation
£5
LSD Coll. Volume 2
£5
LSD Coll. Volume 1
£5
Utilities Experience
£3
Movie Maker v1
£3
Epic Encyc 1996 4mb
£5

OVER 200 AMIGA GAMES IN STOCK
CALL FOR A FREE FULL COLOUR CATALOGUE

Commodore Mouse Mat	£3.99
Standard Amiga Mouse	£8.99
Official Amiga Mouse&Mat	£12.99
Joysticks...	poa
10 capacity disk box	50p
10 Quality Blank DSDD disks	£4.95
Amiga User Manuals	£call
Amiga to PC Monitor adaptor	£10
Various Cables	£call
Disk labels	2p ea
3.5" A1200 Hard drive cable	£20

Consumables
Any Amiga

Pinball Brain Damage is an exciting new AGA only Pinball simulation, featuring Super-hires graphics!, multi ball, multi flipper and tons of other features. *Look out for the review!*

Order: CD486 UK : £19.99 - AUST : $40

Pinball Brain Damage

Anime Babes "Special Edition" is an Adult CD containing **thousands of high quality japanese Manga type images**. *Some people may find this CD offensive. Contains images of sexual acts. (18)*

Order: CD491 UK : £19.99 - AUST : $40

Anime BABES SE
NEW Any

Around 100 variations of the all-time classic game "Tetris". All the games are runnable from the CD.
Makes a great gift for anyone!

Order: CD148 UK : £9.99 - AUST : $20

Nothing But Tetris
Any

Contains 500 commissioned high quality professional clipart images, all of which are royalty free. It's supplied with a 30+ page booklet showing all the images. Every Cartoon image on this CD is 100% original. A great value, high quality product.

Order: CD235 UK : £19.99 - AUST : $40

Mick Davis' CARTOONS
Any Amiga

ENCYCLOPEDIA OF THE PARANORMAL
AGA, 4mb ram

Order: CD423 UK : £19.99 - AUST : $40

The Epic Interactive Encyclopedia of the Paranormal is an exciting new multimedia Amiga based CD-ROM featuring high-res AGA graphics throughout. Covering subjects like: ***UFOs & Aliens, Strangelife (Bigfoot, Lochness monster etc), Mysticism, Mind over matter, Myths and Legends*** and more, this CD promises to give you an "experience". Also for the first time on an Amiga multimedia CD, there are true "AVI" files (Audio & Video). Hundreds of colour images, masses of AVI's, and animations, hundreds of voice-overs, over 40 minutes of presentations around 400 subject synopsis', and hundreds of 'cross-referenced' articles.

AS SEEN ON TV

Features Include
***Hundreds of articles - *Updated interface - *Hundreds of film clips**
***Hundreds of images - *Sound clips - *True AVI feature**
***Over 400 Synopsis' - *Full Multimedia Presentations**

FREE CD'S
With Every Purchase Over £25

SOFTWARE EXPLOSION! **- New Release -** ***Worth £20 - Place an order now of £25 or more and receive this CD free!*** **Contains a wealth of software, Including: Workbench Games, Fonts, Textures, Clipart, Multimedia Backdrops, Samples, Music modules, Business Letters, Tetris Games, 3D Objects, 3D Backdrops, Images, Colour Clipart, Tools and more.**

Spend £50 and we'll send you another *Mystery* CD free.
Spend £75 and we'll send you another 2 CD's free! etc...

epic multimedia
AMIGA International
GRAPHIC DETAIL
SCHATZTRUHE
guildhall
ACID SOFTWARE
ALTERNATIVE SOFTWARE
TFC SOFTWARE
Quicksilver
Weird Science
CLOANTO
ISLONA Games

PLEASE SEND ME...... AM

____
____
____
____
____

THE TOTAL VALUE OF THE GOODS ARE £______
PLUS POSTAGE OF £______
SO THE TOTAL OF MY ORDER IS £______
MY NAME AND DELIVERY ADDRESS IS...

____
____
____
____

TEL:__________ AMIGA MODEL__________
I WISH TO PAY BY....
CHEQUE ☐ POSTAL ORDER ☐ CREDIT CARD ☐
CARD NUMBER__________ EXP_____ ISS___

AMINET CD-ROMs
NEW PRICES!

Aminet Set One & Two
each set contains a 4 CD set with mb's of tools, images, modules, animations and more.**Only£15.99**

Aminet Set Three
A 4 CD set containing some of the latest tools, images, modules, animations and more. **Amazing! £15.99**

Aminet Set Four
A 4 CD set containing some of the latest tools, images, modules, animations and more. **£27.99**

Aminet Set Five
The Latest 4 CD set containing the latest tools, images, modules, animations and more. **£27.99**

Now you can use any PC Trackball or Mouse on your Amiga!

NEW
Amiga
£39.99

PRIMAX Master Mouse

Mouse Master is a stylish Trackball that doubles up as a Mouse! Supplied with our Mouse-IT software and dongle, This allows any PC serial mouse, trackball or pad to be used on the Amiga. You can buy Mouse-IT seperately for just £7.99 or get it free when you buy the PRIMAX Master Mouse.

XCOPY Pro^
XCopy Pro is the most advanced Amiga disk copier suite available. It includes numerous duplication modes from standard dos type copy to a deep nibble type copy.
Every Amiga owner should have a copy!
UK : £12.99 - AUST : $26 *Available from the UK only*

Blitz Basic 2.1
A next generation BASIC with features borrowed from PASCAL, C and others. Program any type of software with more power than ever before.
Complete with full manual.
AVAILABLE ON DISK AND NOW AMIGA CD-ROM.
The CD version includes the full Blitz Basic 2.1, the full printed manual as well as on-disc manual, The complete range of BUMS (**B**litz **U**ser **M**anuals) - These alone would cost you over £200, source-code and more. Order: (CD500)
UK : £19.99 - AUST : $40

Mini Office Suite^
Recently re-released by Guildhall, this superb easy to use office suite is great for the home and small business, It includes a Word Processor with a spell checker, Database, Spreadsheet and more.
UK : £19.99 - AUST : $40

FREE 24 PAGE COLOUR CATALOGUE AVAILABLE.
Send a SAE Now!

Screen Scene

Welcome to one of the most exciting Screen scenes we've had in years. Some huge game releases await your delectation, including two of the highest scores in ages. Also a report from the Italian games scene, and the usual mix of tips, hints and news!

Reviews

36 Game Italia
37 News
38 OnEscapee
42 Myst
46 Final Odyssey
49 Sword

Myst 42

OnEscapee 38

Game Italia

No-one quite knows why, but some of the very best Amiga games have come from Italy lately. Big Red Adventure, Shadow of the Third Moon, the amazing Golem... but there's a lot more. Massimo "Maxime" Marino of "The Games Machine", the biggest selling Italian Amiga/PC games magazine has the full story.

The Italian Amiga market is going through a peculiar period due to general uncertanties about the future of Amiga. Never- theless Italian users are keeping hopes alive; the first "Pianeta Amiga" show (Empoli, 20-21 September 1997) and seventh "IPISA" conference (Milano, 29-30 November 1997) confirmed that our optimism is still high and Jasa Comms are going to organize the 2nd edition of "Pianeta Amiga" in April, following the popularity and all the software/hardware sold by the companies present at the first.

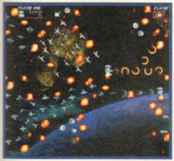
Big Surprises

On the games scene, Italy (the country where Breathless, Shadow of the 3rd Moon, The Big Red Adventure, Fightin' Spirit and Virtual Karting were born) is planning several surprises in 1998.

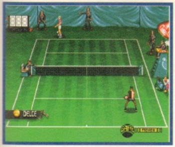
The most ambitious project is surely Underground Software's Golem, which you will hear a lot more about before it gets released sometime after June, but the other games are not less important.

Darkage Software is trying to organize something like the F1 Licenseware circuit in Italy, and is soon to release a high quality shareware game called Alive, a classic arcade blaster with a fast and frenetic two players mode. The second Darkage game will be a Sega Rally clone – I have just tested the 3D rou-

▶ Olofighter from The Real Ologram – Beat 'em up in more than 4000 colours.



▲ Alive – Manic all action shareware blaster.



▲ Quiet Please Tennis, from the Spooky Fellows.

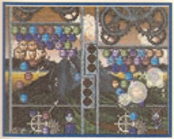
tine and it's absolutely great! It could be published commercially if it maintains current promise. Do you remember Fabio Bizzetti's Virtual Karting? Well, Fabio finished a Deluxe version many months ago but he is still waiting for a company to publish it. Meanwhile The Spooky Fellows are working hard on Quiet Please Tennis in order to finish a playable demo and find a publisher after some delays in development caused by university exams and long nights spent in front of a PlayStation.

4500 colours

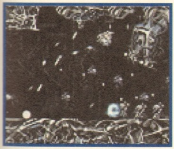
Trauma Zero team is coding a nice and well coloured shoot'em up called Trauma Zero (original, isn't it?) that features a PAL overscan video resolution, more than 256 colours, 1/4 pixel scrolling, two players at the same time and a big number of sprites, while The Real Ologram team is shortly going to release a playable demo of Olofight, a cool beat 'em up that features 4500 colours at the same time, 3D graphics, animated backgrounds, shadow effects and musics that follows the progress of the combat.

During the "Pianeta Amiga" show, Hurricane Software presented two games they're working on: Eat the Whistle and Escape Towards the Unknown, a Sensible inspired soccer game and a graphic adventure respectively, the latter originally coded in AMOS but now completely rewritten in C language in order to facilitate the eventual porting to other operating systems. To conclude this short item about the Italian games scene, I would like to tell you about the newly available Powerball by Skywards Software (authors of the mad Mikro Mortal Tennis), a simple puzzle game with 80 levels of increasing difficulty (and if you think they are not enough, you can create your own levels with a complete editor) and the development of Bubble Heroes by Arcadia Developments, an interesting Puzzle Bobble / Puzzle Fighter clone featuring shoot'em up elements, 512 colours, lighting effects, 64 pixel AGA sprites, animated backgrounds, super deformed anime style graphics and three different playing modes. I think that's all... for now! ■

Massimo Marino



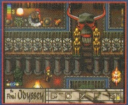
▲ Puzzle heroes – classic puzzle action.



▲ Trauma Zero from... er, Trauma Zero.

News

Scholarship Odyssey

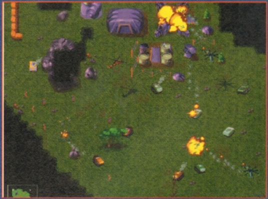


Peter Spinaze, the developer behind Vulcan's excellent new game Final Odyssey has won a scholarship to Silicon Studio, one of the world's leading Digital Arts training facilities.

Proving the value of the Amiga as a creative machine yet again, it is in a large part for his superb graphical work on Final Odyssey that Peter won this scholarship. He will be studying 3D animation using Alias Wavefront on Silicon Graphics systems. It's a pity that he couldn't be studying on an Amiga, but congratulations are certainly due to the Australian graphics meister.

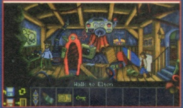
More Sadeness Signings

Sadeness Software have announced the signing of two new games, Dafael: Bloodline, and Forgotten Forever. Dafael: Bloodline, formerly known as Child of Darkness, is a top down RPG with Streetfighter like sequences thrown in and a graphical style strongly influenced by Japanese manga. Forgotten Forever is the long - awaited Command and Conquer clone from Charm Design. Sadeness have been favourites to sign Forgotten Forever since they signed up Invictus Team's superb OnEscapee, reviewed this month. Charm Design and Invictus are old friends.



Two from Alive

Alive Media Software, the company behind Blade, have also signed up two new games titles, the bizarrely named Tank Goblins, and the even more bizarrely named Gilbert Goodmate and the Mushroom of Phungoria. Tank Goblins is a 3D shoot 'em up with the normal slew of fantasy denizens such as orcs and goblins who, as the title would tend to indicate, are at war with each other using tanks. GGatMoP is a Monkey Island style graphic adventure which is already looking very impressive indeed.



OnEscapee

AMIGA
MAGAZINE
SUPERSTAR
NEW GAME

■ Price: £29.95 ■ Developers: Team Invictus ■ Publisher:Sadeness ■ Available from: Weird Science

**The confusingly titled, Flashback inspired platform puzzler OnEscapee has arrived at last.
Does it live up to all the hype and expectation?**

Some years ago, French games Software house Delphine redifined the idiom of the platform game with the near legendary Flashback. Eschewing the trend for Italian plumbers, blue hedgehogs and high speed gameplay, Flashback put you in charge of a man stranded on an alien world. Flashback was the game that introduced the world to the narrative platform game, in which thought is more important than reactions and the nature of the challenges presented to the player change to suit the development of the storyline.

The platform genre has since developed along a rather different path. Delphine' Fade to Black, a de facto sequel to Flashback, lead the way into the kind of 3D adventure which has reached its apex – in terms of popularity, at least – in Tomb Raider. The history of computer gaming has left it to two Hungarian friends, Akos Diviansky and Tamas Kozak, to bring the 2D platform puzzler into the last years of the 20th Century. The good news for lovers of those great games of the past is that they have done it with an impressive degree of craft.

Bladerunner

The first thing that you will notice about OnEscapee is the intro sequence, an impressively atmospheric, Bladerunneresque piece. All to often intro sequences are nothing more than a short, irrelevant animation that you won't want to see twice; not in the case of OnEscapee. OnEscapee turned up in the same month as Final Odyssey.

The latter has an abysmal rendered intro sequence quite at odds with the well executed cartoony graphics and rather excellent game which follows, while OnEscapee's intro sequence is a superb prologue to the narrative of the game. Like the in–game graphics, the intro is mostly hand drawn. It is stylised, very film noirish in execution. An unusual touch, a theme tune with vocals, adds moodiness.

The plot is certainly very cliched – alien visitors abduct the hero for reasons unknown, he struggles and the the flyer they are in crashes. He survives, but must now escape his mysterious alien enemy. The direction, however, is superb. The cut scenes, the clever effects and the dark soundtrack foreshadow the game beautifully – stylistically so similar to the experience of the game that it all segues into the first screen seamlessly.

Although the plot has strong overtones of Flashback and the character animation is almost identical, the gameplay actually has rather more in common with Flashback's predecessor, Another World. Delphine's earlier offering was less of a platform game. It was not entirely succesful for the simple reason that the more varied gameplay style meant each level used a lot more memory compared to the more homogenous gameplay of Flashback, and as a result it was far too short. In the era of CD-ROM entertainment, storage capacity is really no concern. As you play OnEscapee you find all the standard moves complemented with a lot of dynamically interactive extras

It would spoil the plot to give away too much about these extras, but to illustrate the way the gameplay flows, I'm going to have to give away a bit. Unless you are desperate to play through the whole game without help, skip to the box entitled "In the beginning", I'm only going to reveal enough to get you through the first couple of minutes of play.

▲ Ridley who?

Monkey Puzzle

Getting the puzzles in any adventure game right is an incredible balancing act – make everything too intuitive and the game is too easy, make it too obscure and the game is unrewardingly hard. The reason why the Monkey Island games, or Flashback/ Another World are respected to this day, is that they did this so well – but everything is flawed.

Anyone who's played one of these games can probably remember one puzzle they spent hours on, only to discover the solution was something so irrational there seemed to be no reason to try it. It would be a worrying thing if you didn't get stuck in OnEscapee; otherwise you'd fly through the game far too easily. Indeed on one or two occasions while playing OnEscapee I did get stuck, and no doubt anyone else playing it would find the same, if perhaps in different places. I suppose only time and the opinions of thousands of players will decide for sure whether Team Invictus have acheived this well enough to elevate OnEscapee to the level of the other games mentioned, but to my own debatable logic the balance was extremely good if not quite classic.

As I got into the logic of the game, and made my way past the first few levels, I worried that there wouldn't be enough of the game to last. Luckily, as the game progresses it also gets more complex. The first level has only a handful of screens, the epic city level has something like a hundred. You may think the game is passing too quickly, but look at your watch and you could find that you've become a little more immersed in the atmosphere than you thought. Like all games of this type, I'm sure that once you have finished playing you'll be a little disappointed that there isn't more, but even when you know exactly how to solve the game it should take a few hours to work your way through.

Certainly I spent more time playing this than is usually spent on a game being reviewed, but even with save positions handily provided I'm left with areas unexplored and bad guys as yet undefeated. I'm sure I will be back to finish this game in my spare time! A small scattering of logic games help the game last, but are something I remain ambivalent about. I imagine getting stuck on one for too long would be very annoying.

Nice Icon

OnEscapee is an impressively well produced title. Even the CD icon impressed me, a nice NewIcon of the Logo with a drop shadow, lovely with transparency on. The simple but useful text file is present in a huge range of languages – this is the first game I have come across with instructions in Farsi – and is present in HTML web format also. HTML pages are likely to be the multimedia replacement for Amigaguide documents in the next generation of Workbench, so congratulations to Sadeness getting in on the act quickly and well.

The big congratulations should be saved for Team Invictus, for the presentational detail that has gone into OnEscapee. Playing the game is quite an experience. The graphical design of the game is simply superb, and the music beautifully integrated and totally atmospheric. The game is packed with clever graphical tricks, not just animated background detail, but things which interact with the player, such reflection of the main character in the rippling surface of the water level. Cut sequences appear throughout the game and do their job well, the innumerable death sequences making a particular impres-

◀ **Just some of the lovely scenery you get on your tour of OnEscapee. I hear that Thomas Cook are sending their reps...**

In the Beginning....

... craft sent by your mysterious enemies to zap you. You are hemmed in, by a fence on one side and an electrified pylon on the other. If the flyer catches up, it fires a beam of energy at you which knocks you flying. Let it hit you a couple of times and you die horribly.

Let it hit you once, in just the right place, and it will blow you clean over the pylon. You keep running, and after a while find a downed car to shelter in. The flyer comes over head and charges up its beam, leaving you just enough time to flee before the car is blasted. Fortunately for you the blast has opened up a small hole in the floor. Run across this and you fall in to safety. In the cave below, you see something on the ground glinting – a sure sign of something to collect. You walk to it and pull the joystick down to pick it up, then walk further into the cave. Hanging fronds block your path, so you pull the joystick down to crouch, then tap it to the right, carefully timing your hero's roll so he passes under the thrashing plants. You pass a shadowed crevice and into the next area where a panel in the wall appears to have an empty socket in the center. You walk to the panel and push the joystick up, causing the character to put the object he picked up previously in the slot. Back in the previous chamber, the striplights have powered up and illuminate the way into the crevice.

You push the joystick up to walk into the screen and enter another cave. Here a monster hangs from the ceiling, blocking your path. Those huge jaws look dangerous to pass, and sure enough beneath him is the rotting corpse of an unlucky traveller, the bones being picked clean by a group of cave bats. Edge carefully towards the corpse, and as you disturb it with your foot, the bats fly up... now maybe you can slip past while the monster is distracted by the bats?

▲ **Top death scene from the Invictus lads.**

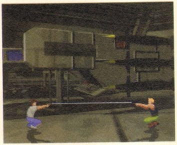
sion on this reviewer. Trying all the different ways of dying to see all those darkly humorous death scenes is almost a game of its own.

A menu screen allows you use a slightly faster frame rate if you have an accelerator, and allows you to load and save game positions at any time. The save game file contains a screen grab of the point at which you stopped, a nice touch that removes the old problem of remembering why on earth you called one save position Squid3 and the other GOB. There is support for joystick, keyboard and CD32 pad, and a screenmode selector to allow running the game on VGA only monitors.

Currently an AGA equipped Amiga is necessary, but Sadeness have told us they will provide a free upgrade patch for graphics card users in the near future, along with another patch which tweaks the character control method a little. Personally I liked the way the controls were configured, but apparently some of the feedback from the demo requested an alternative.

Technically OnEscapee impresses the way a good demo can, catching you by surprise with a little graphical trick or clever effect. In purely game terms, it is a little flawed. The control is not quite as responsive as it could be, and positioning can on one or two occasions be pretty finicky. Once or twice I had to repeat my actions several times to get something done, but the only time this really stood out was when I rather embarrassingly failed to dodge a falling pile of rubble about 20 times in a row because of something I hadn't twigged about the controls. Once you have learned the peculiarities of the control method, this will fade to a minor niggle – you will anticipate the slightly sluggish reactions to jump, for instance, and not end up at the bottom of a chasm so often.

I seem to remember Flashback suffered from this problem too. One saving grace is that the game can be saved at any time, and you can restart quickly right in the thick of where you last died, so you can have another whack at the problem straight away.



► **Fine... but who shot who here? Just a little proof that it isn't all puzzles.**

Worrying Anatomy

I have to say I am very pleased to see a game which plays so much to the Amigas strengths. Going for the 2D hand drawn look, Team Invictus have produced something that looks bloody good without having to worry about the horsepower of the CPU. If you find the game a little jerky, it is most likely because your CD-ROM drive is a little slow.

I have to confess that the artwork is imperfect, and more noticably so just because it is hand drawn. It is after all a lot easier to animate a render than it is to animate 2D artwork. The backdrops are all gorgeous, but some of the anatomy worries me. I am perhaps over sensitive to this having spent rather a lot of time learning to draw figures myself, but the character is not always correctly proportioned.

On the other hand the highly acclaimed rendered cut sequences in Tomb Raider display a shockingly poor grasp of kinetics and a very feeble grasp of human physiognomy – and I'm not just talking brasize.

If the raw draughtsmanship is merely very good, the audiovisual production overall is excellent. I know I've said this before, but I'll say it again, OnEscapee is a real experience. It isn't what we are used to, following a rather more sophisticated aesthetic than the average game, more Luc Besson than Lara Croft. I guess some people will be turned off by that, but personally I love it.

One what?

Just to make it clear to all the confused people out there, the game is called OnEscapee, pronounced "one escapee". The alternative reading of "on escapee" is just gibberish, while overtones of "on escape" may well have been intended. Just think yourself lucky that the cheesy working title Dreams of the Future was dropped!

OnEscapee is a game you can load up and show to anyone used to Playstation, Nintendo or PC games without them wondering what you are on. Even if it is not their cup of tea, they are likely to be intrigued. OnEscapee is perhaps more suited to the epithet flawed masterpiece than instant classic, but those flaws aren't big. The game style is a bit behind the times, but a format well deserving of resurrection.

If you like action/adventure you are almost certainly going to find OnEscapee an excellent purchase; if like myself you thought that Another World and Foundation were superb then you've wasted far too much time reading this review and you should be on the phone ordering your copy right now. ■

Andrew Korn

ONESCAPEE

- Workbench version......N/A
- Number of disks..........CD
- RAM..............................4Mb
- Hard disk installable ...A/A

Graphics 94
Sound.................................. 92
Lastability............................ 90
Playability 88

OVERALL

Art or computer game? Who cares when it's this much fun!

92

confused
alled
scapee".
escapee"
es of "on
tended.
ne
the

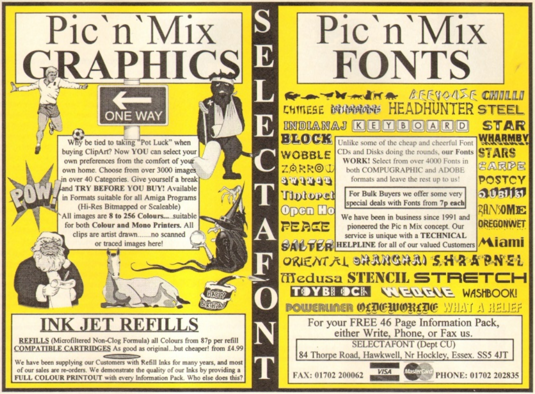
ore, but I'll
xperience.
ing a
c than the
han Lara
turned off

load up
tation,
em won-
s not their
rigued.
d to the
nstant clas-
game
a format

are
scapee an
ou
oundation
ar too
d you
your copy

94%
92%
90%
88%

92%



Pic`n`Mix GRAPHICS

ONE WAY

Why be tied to taking "Pot Luck" when buying ClipArt? Now YOU can select your own preferences from the comfort of your own home. Choose from over 3000 images in over 40 Categories. Give yourself a break and TRY BEFORE YOU BUY! Available in Formats suitable for all Amiga Programs (Hi-Res Bitmapped or Scaleable)

All images are **8 to 256 Colours**....suitable for both **Colour and Mono Printers**. All clips are artist drawn.......no scanned or traced images here!

INK JET REFILLS

REFILLS (Microfiltered Non-Clog Formula) all Colours from 87p per refill
COMPATIBLE CARTRIDGES As good as original...but cheaper! from £4.99

We have been supplying our Customers with Refill Inks for many years, and most of our sales are re-orders. We demonstrate the quality of our Inks by providing a **FULL COLOUR PRINTOUT** with every Information Pack. Who else does this?

SELECTAFONT

Pic`n`Mix FONTS

BEEHOUSE CHILLI
CHINESE HEADHUNTER STEEL
INDIANAJ KEYBOARD STAR
BLOCK WHARMBY
WOBBLE STARS
ZORRO CARPE
SWINGE POSTCY
Tintoret QUBIST
Open Ho RANSOME
PEACE OREGONWET
SALTER Miami
ORIENTAL SHANGHAI SHRAPNEL
Medusa STENCIL STRETCH
TOYBLOCK WEDGIE WASHBOOK!
POWERLINER OLDEWORLDE WHAT A RELIEF

Unlike some of the cheap and cheerful Font CDs and Disks doing the rounds, **our Fonts WORK!** Select from over 4000 Fonts in both COMPUGRAPHIC and ADOBE formats and leave the rest up to us!

For Bulk Buyers we offer some very special deals with Fonts from **7p each**

We have been in business since 1991 and pioneered the Pic n Mix concept. Our service is unique with a **TECHNICAL HELPLINE** for all of our valued Customers

For your FREE 46 Page Information Pack, either Write, Phone, or Fax us.

SELECTAFONT (Dept CU)
84 Thorpe Road, Hawkwell, Nr Hockley, Essex. SS5 4JT

FAX: 01702 200062 VISA MasterCard PHONE: 01702 202835

A127
Junction
M25
WE ARE HERE

SPECIAL RESERVE NEW CLUB SHOP

UPMINSTER GRAND OPENING OCT 18TH

209-213 St. Mary's Lane, Upminster. Opposite Somerfield

✓ Pre-release games to try ✓ Special attractions ✓ Free gifts
✓ Competitions ✓ Meet Games Master's Dave Perry

Feel free to come along for a fun day out for all the family

A500 Software

= HARD DRIVE REQUIRED

(100 SHAREWARE GAMES)	9.99
FODDER 2	13.99
ONSHIP MANAGER 2	22.99
ENGINE 2 92%	19.99
ZATION	13.99
US CHESS X (NO12)	4.99
GIRL STRIP POKER	9.99
CAPTAIN (NOP)	3.99
T MASTERS	13.99
OUBLE HORSE RACING	3.99
PAINT 3 erful art and animation package ive features. A best seller and a winner. Many font and printing and sample animation and art (Installable)	4.99
GHT	9.99
- BATTLE FOR ARRAKIS	12.99
EAGUE MANAGER 2MB	12.99
STERS	13.99
IGHT HAWK	9.99
KE EAGLE II	13.99
LTH FIGHTER	13.99
OF GLORY	13.99
ALL COLLECTION VOL 1 OTBALL, CLUB AND COUNTRY, INT'L SOCCER	**14.49**
L MASTERS	13.99
2000	13.99
ENCH (8 TO ADULT	19.99
OSE GOLF	9.99
FURBALLS THE ABDUCTION	10.99
RAGE	19.99
TYCOON	12.99
WORLD OF SOCCER 96/97	18.99
WORLD OF SOCCER 96/97	9.99
ERS	13.99
SERVICE 2	13.99
THE SORCERER	9.99
LORD	9.99
PACK SKIDMARKS, SUPER TENNIS, EAGUE MANAGER	**10.99**
SKID MARKS	7.99
PARK	14.99
PURSUIT (HARD DRIVE IRED)	1.99
EMY UNKNOWN	13.99
MMANDER	9.99
ORTH V5SE word processor. Features display, desktop publishing spell checking. Very easy to and excellent printing options	17.99
	11.99

A1200 DESIGN PACK

DESIGN & PRINT PACK FOR A1200 CONTAINS WORDWORTH 2.0, DELUXE PAINT IV AGA, PRINT MANAGER, OSCAR & DENNIS	9.99

A1200 Software

ACID ATTACK COMPILATION GUARDIAN, ROADKILL, SUPER SKIDMARKS	**14.99**
ALIEN BREED 3D	8.99
ALIEN BREED 3D 2 96%	17.99
CHAOS ENGINE 2	19.99
COLONIZATION	13.99
FEARS	7.99
FIELDS OF GLORY	11.99
GUARDIAN	6.99
PREMIER MANAGER 3	5.99
ROAD KILL	5.99
SLAM TILT	7.99
SUPER STREETFIGHTER 2 TURBO	14.99
THEME PARK	14.99
UFO - ENEMY UNKNOWN	13.99
WORDWORTH SPECIAL EDITION Features WYSIWYG display, DTP features, spell checking, very easy to use interface and excellent printing options	9.99
WORDWORTH V6 New features in this version include improved drawing tools, more AREXX commands, watermarks, 50 compugraphic fonts, improved RTF support and other enhancements (3MB RAM)	34.99
WORMS - THE DIRECTORS CUT	18.99

CD32 Games

ACID ATTACK COMPILATION GUARDIAN, ROADKILL, SUPER SKIDMARKS	**14.99**
ACTION PACK VOL 1 LEGENDS, FEARS, GLOOM	**14.99**
SPEEDBALL 2	1.99

PC CD TOP 15

AMIGA EMULATOR	15.99
BROKEN SWORD 90%	8.99
CARMAGEDDON (15)	28.99
CHAMPIONSHIP MANAGER 2 97/98	17.99
CMND & CNQR RED ALERT	28.99
CMND & CNQR AFTERMATH - RED ALERT DATA CD	12.99
DUKE NUKEM 3D (18) 93%	10.99
DUNGEON KEEPER 96%	28.99
EXTREME ASSAULT	21.99
IMPERIUM GALACTICA 90%	28.99
PREMIER MANAGER 97 83%	22.99
SECRET OF MONKEY ISLAND 1 & 2	12.99
THEME HOSPITAL 91%	28.99
WARCRAFT 2 DELUXE	29.99
X-COM - APOCALYPSE 95%	28.99

PLAYSTATION TOP 15

DIE HARD TRILOGY 93%	35.99
FORMULA 1 97	39.99
INT'L SUPERSTAR SOCCER PRO	34.99
JURASSIC PARK - LOST WORLD	35.99
MICRO MACHINES 3 94%	27.99
ODDWORLDS: ABE'S ODDYSEE	31.99
PREMIER MANAGER 98	29.99
RAGE RACER 94%	34.99
SOVIET STRIKE 82%	19.99
SYNDICATE WARS 88%	35.99
TOMB RAIDER 95%	35.99
WARCRAFT 2 90%	36.99
WORMS 92%	17.99

N64 TOP 15

BLAST CORPS	46.99
F1 POLE POSITION •	44.99
FIFA SOCCER	29.99
GOLDENEYE WITH FREE 256K MEMORY CARD (RUM).	52.99
INT'L SUPERSTAR SOCCER 64	49.99
KILLER INSTINCT GOLD 88%	46.99
LYLAT WARS (90%) + RUMBLE PACK WITH FREE MEMORY CARD	52.99
MARIO KART 64 92% WITH FREE MEMORY CARD	52.99
MORTAL KOMBAT TRILOGY	49.99
PILOT WINGS 64 90%	41.99
SHADOWS OF THE EMPIRE WITH FREE 256K MEMORY CARD	52.99
SUPER MARIO 64 WITH FREE 256K MEMORY CARD	52.99
TONIC TROUBLE •	44.99
TUROK - DINOSAUR HUNTER 97%	48.99
WAVE RACE 64 92%	46.99

SATURN TOP 15

ACTUA GOLF 90%	17.99
DIE HARD TRILOGY 93% (PLG)	22.99
DRAGON FORCE 90%	34.99
PREMIER MANAGER 98	31.99
RESIDENT EVIL	39.99
SHINING THE HOLY ARK 93%	33.99
SONIC 3D 90%	29.99
SONIC JAM 92%	29.99
SOVIET STRIKE 91%	26.99
THEME PARK 92%	15.99
TOMB RAIDER 95%	29.99
VICTORY BOXING	18.99
VIRTUA FIGHTER 2 98%	19.99
WARCRAFT 2 88%	36.99
WORLDWIDE SOCCER 97 94%	19.99

WE ALSO STOCK A HUGE RANGE OF BOOKS FOR CONSOLES AND PC GAMES & HARDWARE

SPECIAL RESERVE MEMBERSHIP GIVES YOU 10 ISSUES OF THE SPECIAL RESERVE CLUB MAGAZINE

Our 48 page full colour magazine, with news, reviews and thousands of products

AND ALL OF THIS FREE

ONLY FROM Special Reserve Live @ http:// special.reserve.co.uk

Buy any one item from our entire catalogue at the same time as joining for a year (£6.00) or more and we'll give you

TOTAL SATISFACTION GUARANTEED OR ALL YOUR MONEY BACK

We'll even collect larger items from your door free of charge if you are not satisfied

EDGE
WORTH £3.50
ZEEWOLF 2

AND A FREE COPY OF EDGE MAGAZINE

AND THE SPECIAL RESERVE BOOK OF 2001 CHEATS

AND FREE AMIGA MEMBERSHIP PACK

Zeewolf 1 & 2, Football Glory and Quickjoy footpedals

THE CHEAT ZONE
Football Glory

ALL OFFERS SUBJECT TO STOCK. OTHER OFFERS ARE AVAILABLE. OVERSEAS MEMBERS PLEASE ADD £2 POSTAGE

CONTROLLERS

QUICKSHOT 137F PYTHON ...11.99
WITH AUTOFIRE

LOGIC 3 JOYPAD
9.99
AUTOFIRE

LOGIC 3 SPEDMOUSE ... 9.99
300 DPI, 2 BUTTONS

LEADS

JOYSTICK EXTENDER CABLE (3 METERS)	7.99
JOYSTICK SPLITTER CABLE	7.99
MONITOR LEAD AMIGA TO CM8833 OR 1084S	10.99
NULL MODEM CABLE (25 PIN, 1.8 METRES)	10.99
SCART LEAD AMIGA TO SCART TV	10.99
SCART LEAD CD32 TO SCART TV	10.99

AMIGA PARTS

72 PIN SIMM'S FOR PC, A4000, SX-1 AND A1200 RAM BOARDS

4 MB 72 PIN SIMM	17.99
8 MB 72 PIN SIMM	29.99
16 MB 72 PIN SIMM	58.99

EXTERNAL DISK DRIVE FOR AMIGA OR SX-1
47.99

EXTERNAL 33.6 FAX MODEM ... 69.99
SMALL COMPACT DESIGN, COMPLETE WITH CABLES, INTERNET BUNDLE AND **FREE** STARTER GUIDE

ANTI-SURGE 4 WAY TRAILING MULTI-PLUG	24.99
INTERNAL DISK DRIVE	
FOR A1200/A600	39.99
FOR A500	39.99
EXTERNAL DISK DRIVE	47.99

Over 300,000 people have joined Special Reserve. The biggest games club in the World.
Established 10 years. Special Reserve is the market leader in mail order home computing with a staff of 80.

Special Reserve
Live @ http:// special.reserve.co.uk

Special Reserve

01279 600204

Or fax your order on 01279 726842 - We'll fax back to confirm
Open 9.30am to 8pm (Mon-Sat) 10am to 5pm (Sun & Bank Holidays)

We only supply members but you can order as you join

Trial Membership only 50p

Trial Members receive one issue of the club magazine. Valid for one order.

Annual Membership (UK) £6.00

ANNUAL MEMBERSHIP FEES UK £6.00 EC £9.00 WORLD £12.00
Members receive ten issues of the colour club magazine per year, a free copy of EDGE, Book of 1001 Cheats and a choice FREE gift when you buy any item as you join. There is no obligation to buy anything.
All prices include VAT and carriage to MOST UK mainland addresses.

(BLOCK CAPITALS please) CU AMIGA
Name & Address ______________________
____
____
Postcode ________ Phone No ________ Machine ________
Enter membership number (if applicable) or NEW MEMBERSHIP FEE (ANNUAL UK £6.00) ☐
item ______________________ ☐
item ______________________ ☐
item ______________________ ☐
For **OPTIONAL** first class post add 50p per item
For **OPTIONAL** fast delivery on hardware add £3.00
ALL PRICES INCLUDE UK POSTAGE & VAT
Cheque/P.O./Mastercard/Creditcharge/Switch/Visa £ ______
☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐
CREDIT CARD EXPIRY DATE ________ SIGNATURE ________ SWITCH (ISSUE NO ________)

Overseas surcharge £2.00 per item - credit card only

Bristol Shop

Cheques payable to
Special Reserve at
PO Box 847, Harlow, CM21 9PH

We are mainly mail order but we also have
Four impressive Special Reserve Shops

Bristol, Avon 351 Gloucester Rd (A38)
1½ miles from the centre, near Kwik Save
0117 924 5000

Chelmsford, Essex 43 Broomfield Rd
near the bus station
01245 348777

Sawbridgeworth, Herts The Maltings
Station Road, near the train station
01279 600399

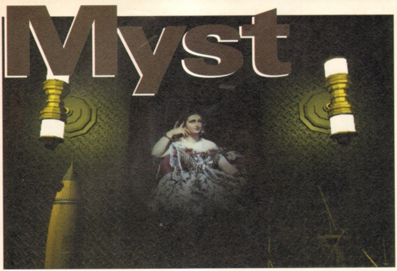
Stapleford, Nottingham 164, Derby Rd
2 miles from J25 of M1, next to Kwik Fit
0115 949 1000 Opens Sept 13th

ALL our shops have full PC Repair and Upgrade Facilities - We fit almost any item bought for £10
Some items bought in the shops carry a £1 surcharge on the mail order prices

We GUARANTEE TOTAL SATISFACTION! Inevitably some products listed may not yet be available. Please phone to check availability. Prices may change without prior notification. SAVE = Saving off full recommended price. Sent to press 22.9.97 Errors & Ommisions Excluded.
Inter-Mediates Ltd, The Maltings, Sawbridgeworth, Herts CM21 9PG

NDO 64 £144.99 including controller **PLAYSTATION £129.99** includes controller and 'Demo 1' CD **PLUS save £10 on any other item bought at the same time**

Myst



What more can be said about the best-selling CD-ROM game of all time except that it's finally here?

I remember the excitement in the air when the hoax Myst demo was shown at the Montreal Amiga Convention in the summer of 1996 – on a PAWS portable Amiga, no less. The prevailing mood as we stood there and boggled was that it must be a hoax – but at the very least it was a proof of concept. An AGA Amiga could very well run the game that's kept millions glued to their monitors. Now, nearly a year and a half later, ClickBOOM's development team has made Amiga Myst a reality.

By now, after the months of buildup in this magazine as well as the years of coverage in the popular media, everybody has at least a vague idea of what Myst is all about. It's some sort of graphical adventure. The spartan documentation isn't much help either – it's safe to say that the box tells you more about the actual "purpose" of the game than the CD case booklet does.

Part of the purpose of Myst is that it's a game of exploration. It wouldn't be unfair to say it is about solving a mystery or two. That makes it unfair to both of us if I give you a complete plot summary, but it is worth knowing that the experience of Myst revolves around a man named Atrus and his rather unusual books.

"But it's just a slide show!"

If you REALLY insist on treating Myst as a slideshow, go ahead. Open up a graphics viewer and just go through all the pictures on the CD. There's no special encoding to stop you.

I guarantee it'll work. Then, when you've worked that out, double-click the Myst icon and play the game. I guarantee that it is a lot more fun that way.

Atrus is an avid scholar and scientist – a true renaissance man. It's often said of a good book that it makes you feel like you're in a different time and place – but Atrus' books really DO take you to a different time and place. That's how you wound up, disoriented and aimless on the seemingly deserted island of Myst. A catastrophe has befallen Atrus and most of his books – but some remain, waiting to be discovered by you, to transport you to other lands where you can piece together the information and evidence you need.

For you, the player, you have only the mouse at your disposal. Myst is completely driven by graphics – the ultimate GUI. Unlike other games which have attemped this (Sierra in particular), there's no complex inventory management to deal with. In general, objects you can pick up are for very specific, one-off uses – you don't need to wonder if you'll need that match you just picked up in two hours. Myst does revolve around puzzles, but they're typically not of the "Use object X on object Y" variety. Rather, you have to learn, read, record, and interpret what you see around you and can cull from Atrus' records, and then figure out how it might be relevant to a particular roadblock.

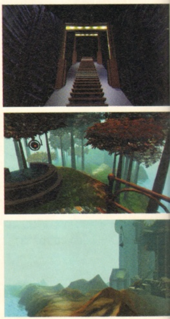
What's the fuss, then?

All of this might sound a bit pedestrian to you, or at the very least nothing that should have made millionaires out of its authors. And I'll warn you right now – for the first five minutes you play Myst, you may well come to that conclusion. Click forward, flip switch, click forward, ho hum. Particularly if you're in a rush, or haven't approached the game with an open mind, it's entirely likely that your first impression will be negative. Mine was, both when I first played the game on a PC a couple of years ago and when I got the ClickBOOM preview. But then I sat down, cleared my schedule, and gave Myst a real chance.

Then, I started to like it. It really started to suck me in – not quite so much with the graphics, although they are nice. It was the music and the sound effects that really did it. So often when a game author is trying to create an engrossing environment, they forget to stimulate as many of your senses as they can. Without tactile feedback and Smell-O-Vision, Myst does a very good job of bringing you into Atrus' world.

It was Atrus himself who put the finishing touches on my conversion. When you find his writings and records, you really get an insight into this man, and why you should feel compelled to do what's right in his name. (That, and there's not much of a game if you don't.) When I'd read his work and examined his drawings, and then tried paging through one of his obliterated books, I actually felt a certain pang of loss and disappointment when all I got were hopelessly destroyed pages. Myst has this funny way of making you care about what's going on.

Of course, the sound and music aren't going to be quite enough to keep you playing for hours and hours. That is where the much-lauded graphics come back into play. No, it's not like playing in a fully detailed 360 degree 3D world. You will find, as I did, that sometimes you feel you should be able to turn to face a certain way and simply can't. In congested areas (forests) this sometimes gets to be annoying and disorienting. But when you do get where you want to be – and even along the way, for that matter – you're treated to some very engrossing imagery. Again, you



can't expect every intermediate "going down the stairs" shot to be an absolute work of art, but there are many locations and rooms in Myst where you should allow yourself a chance to say "Wow. That is really nice," before you start clicking away like mad trying to find the right button to press.

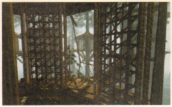
The worlds of Myst you will visit have their own internal logic, as does the game. Discovering that logic is another part of the joy, along with being an appreciative spectator. The game really does make you think. On the other hand, the global proliferation of Myst means that if you DO get stuck, help is never very far away.

The Amiga implementation

It was a hard and fast requirement of ClickBOOM's conversion contract that the game be virtually indistinguishable from the original, and to that end as much of the original's source material has been used. QuickTime, while perhaps not the optimal choice for Amigas all things considered, is used just as on the PC and Mac versions for the in-game animations. The graphics look the more or less the same – I was sent a PC version of Myst for comparison and can confirm that the Amiga version does indeed have nicer images in some scenes.

The only real difference is that to start the game, you have to make sure your audio and video are properly configured. ClickBOOM chose to use the AHI retargetable audio system for Myst – if you don't already have this installed, not to worry, Myst will handle the details for you. For video, you must first select a screenmode before entering the game. Myst will not automatically detect if this screen is large enough, however – experiment with the most attractive (Super72 or a Double-mode, for example) in high res laced/noflicker and reduce to regular NTSC or PAL if your machine is overly sluggish.

You have the option of installing various



◀ Myst looks great on an AGA Amiga, and even better if you've got a 24-bit CyberGraphX set-up.

◀ You've probably gathered by now that the game gets its name from the spooky haze that cloaks the island.

pieces of the Myst CD to your hard drive for optimal performance. In the most extreme cases, you can copy virtually nothing but the executable, or essentially the entire CD. I found that audio lost sync with animated video at times on a minimum-spec quad-speed CD – if this happens to you, experiment with installing more data and relying less on the CD.

CyberGraphX support was and is planned for Myst but in order to ensure Christmas delivery it was left off of the CD for final bug testing. A CyberGraphX executable was not available at the time of this review, but will be on ClickBOOM's website shortly.

What does this mean?

The arrival of Myst on the Amiga, even when you ignore the time that's elapsed since the rest of the world got it, is certainly a major event. It's brought a legitimately enjoyable game to our favorite computer and pushed the envelope of system specs a little bit (can you imagine what would have happened just a scant three years ago if you insisted on 8 megs of RAM, AGA or better, and a CD-ROM drive? Madness in the streets!) And with ClickBOOM in serious talks with ID over making Quake their next project, are we seeing a return to mainstream legitimacy for the Amiga as a gaming platform?

▲ The gloomy atmosphere gets even darker as you gradually uncover the secrets of the game.

The jury is still out on this one, but from my discussions with Alexander Petrovic, Producer of the Amiga port of Myst, it seems clear that we should consider Myst an exception, not a rule. Extraordinary circumstances (the sufficiently eye-catching fake demo) piqued the interest of a developer (Cyan) and an Amiga publisher (PXL) sufficiently that a deal could be worked out. Similarly extraordinary circumstances played a role in the current Quake discussions – the proliferation of technically illegal implementations of Quake on the Amiga due to ID's source code being leaked once again got a lot of attention.

As much as we may like to think so, porting a game from the PC or Mac to the Amiga requires more than sending a case of beer and a stack of source code to a hobbyist Amiga programmer in Sweden. Any project of Amiga Myst's magnitude requires, among other things, extremely strict quality control for an original developer such as Cyan to give it the go-ahead.

So, despite the best intentions of PXL and other aggressive Amiga publishers, it seems that while some doors have been re-opened, there is not bound to be a full fledged re-invasion by those publishers and developers who have dropped Amiga support over the past few years. What's still the most important fact is that Myst is now here. It is what it has been built up in our minds to be – a ground-breaking game. And it's ours now, too. ■

Jason Compton

SHADOW OF THE THIRD MOON

■ Workbench version	3.0	Graphics	97%
■ Number of disks	CD RAM	Sound	94%
■ 8MB HD Installable	Yes	Lastability	92%
■ HD installable	Necessary	Playability	90%

OVERALL

A superb game which looks great too.

92%

Visit us on the Web! - http://www.firstcom.demon.co.uk/

Open Late
Wednesday & Thursday
9:30am until 7:30pm

Open Sunday
11am to 4pm

FIRST
COMPUTER CENTRE

DELIVERY COSTS

2-4 Week Days	£5.00
Next Week Day	£7.00
Saturday Delivery	£15.00

Delivery per order, not per item. Subject to availability

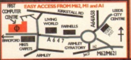
Tel: 0113 231 9444

Fax: 0113 231 9191 BBS: 0113 231 1422
E-Mail: Sales@firstcom.demon.co.uk

Showroom Address:
Dept. CU, Unit 3, Armley Park Court
Stanningley Road, Leeds. LS12 2AE

Please allow five working days for cheque clearance. Prices are correct at the time of going to press. Please check latest prices before ordering. All sales are subject to our standard terms and conditions of sale. Copy available upon request. E&OE. Dated 15/12/97

SWITCH VISA DELTA MasterCard Lombard Finance



AUTHORISED REPAIR CENTRE

Our in-house engineers can offer you a no-obligation **FREE** estmate of repair on your Amiga or any computer peripheral. A delivery tariff of just £5.00 is charged or alternatively, visit our large showroom. We can also arrange for your items to be collected by courier for an additional charge of £11.00

Amiga Hardware

Amiga Magic Packs

Includes Wordworth V4SE, Datastore, Organiser, Turbocalc 3.5, Personal Paint V6.4, Photogenix 1.2SE, Pinball Mania, & Whizz. Now also includes Directory Opus 4.12.

A1200 - 2Mb RAM - No HD	£249.99
A1200 - 6Mb RAM - 170Mb HD	£349.99
A1200 - 68030EC/40MHz 10Mb RAM 170Mb HD	£419.99
A1200 - 68040/25MHz - 18Mb RAM 1.3Gb HD	£599.99
A1200 - 68040/40MHz - 18Mb RAM 1.3Gb HD	£699.99

Hard drive equipped versions of the Amiga range come with Scala MM300 preloaded. Amiga 68040 machines include a 250 Watt PSU as standard.

Monitors

AMIGA
1438/1402 14"
Multisync
only
£259.99

MICROVITEC
1701 17"
Multisync
only
£399.99

CD-ROM & I/O

easy CD-ROM Kit

- 8 Speed PCMCIA IDE CDROM
- Full Manual & UK Power Supply
- Full Software Drivers/CD32 Emulation
- Includes Audio Cable & Prima CD
- Very easy Setup & Installation

Only £119.00

Internal SCSI CD-ROM Drives

Philips 8x Speed	£90.00
Toshiba 5701 12x Speed	£106.00
Plextor X20 20x Speed	£128.00
Single SCSI Case & PSU	£50.00
Dual SCSI Case & PSU	£100.00

Squirrel SCSI-II Interface *£45.00
*When bought with any SCSI device, £55.00 if bought separately

SurfSquirrel SCSI-II Interface *£79.00
*When bought with any modem or SCSI device. £99.00 if bought separately

Octagon/GVP SCSI Card £99.00
SCSI-II interface card for big box Amiga's A4000/2000 etc.

HiSoft SYSTEMS

New!

THE WHIPPET

- High Performance PCMCIA Serial Port
- Upto 230,000bps. 400% Faster Than Standard
- Fully Buffered For Safer & Reliable Data Transfer
- New Faster Technology 56k Modem Ready!!!

Only £49.00 (£45.00 if bought with modem)

Hard Drives

2.5" IDE Hard Drives

Includes installation software, screws, and instructions. For A600/A1200 machines

85Mb	£58.00	524Mb	£114.00
170Mb	£69.00	1.4Gb	£145.00
210Mb	£78.00	2.1Gb	£165.00

Special Purchase!
6.5Gb Quantum Bigfoot
5.25" Fast-ATA2 IDE Hard Drive
Features exceptional sequential performance making it ideal for video and multimedia. Will fit in a standard 5.25" bay. Full 3 year warranty.
Only £209.00

3.5" Bare Hard Drives

IDE		SCSI	
2.1Gb	£122.00	540Mb	£159.00
2.6Gb	£148.00	840Mb	£199.00
3.2Gb	£154.00	2.1Gb	£229.00
4.3Gb	£195.00	3.2Gb	£263.00
6.4Gb	£300.00	4.5Gb	£684.00

3.5" IDE Hard Drive Install Kit
Includes set-up software, cables and full instructions. See above for Hard Drive prices
Only £19.00

Software

Aura 8 Bit Sampler	£30.00
Blitz Basic v2.1	£20.00
Cinema 4D V3	£160.00
Clarity 16	£96.00
Directory Opus 5.6 Magellan	£46.00
DiskMAGIC File & Disk Manager	£35.00
Final Calc	£95.00
G.P.Fax - Generic Class 1&2	£43.00
Hi-Soft Basic 2	£50.00
Hi-Speed Pascal	£65.00
IBrowse (Hi-Soft)	£25.00
Maxon Magic	£24.00
Megalosound	£28.00
Mini Office	£30.00
Money Matters 4	£39.00
Net & Web (Hi-Soft)	£30.00
Net & Web 2 (Hi-Soft)	£60.00
Net Connect V2	£50.00
Network PC (Weird Science)	£18.00
Amiga On-Line Reference Manual	£7.00
PCX-86 Emulator	£50.00
Personal Paint 7.0	£50.00
Power Scan Software	£50.00
Pro Midi Interface	£20.00
Secal Programming	£30.00
Studio 2 Professional	*£50.00
SurfWare Internet Software	£10.00
TechnoSound Turbo II Pro	£30.00
Termite TCP (Hi-Soft)	£45.00
Termite (Hi-Soft)	£30.00
TurboCalc 4.0	£50.00
Turbo Print 5	*£50.00
Twist 2 Relational Database	£75.00
Upper Disk Tools (Hi-Soft)	£11.00
Vista Pro 3 Lite	£5.00
Voyager Internet Software	£23.00
Wordworth 6 3.5" Version.	£40.00
Zip/Jazz Tools	£17.00

*£5.00 off when purchased with a printer

CD-ROM Software

Prima Shareware CD-ROM only £2.00 with any CD-ROM purchase

Delivery £2.00 per title, or £5.00 for 3+

LSD & 17Bit Comp. Vol 1	£18.00	Encounters	£13.00	Meeting Pearls 4	£9.00
LSD & 17Bit Comp. Vol 2	£18.00	Encyc. Of The Paranormal	£18.00	Miami	£28.00
LSD & 17Bit Comp. Vol 3	£18.00	Epic Collection 3	£18.00	Midi Gold	£24.00
3000 JPEG Textures	£9.00	Epic Interactive Enc.1997	£10.00	Mods Anthology	£24.00
3D CD 2 Images	£9.00	Eric Shwartz Animations	£17.00	Movie Maker Special FX1	£18.00
AGA Experience 2 (NFA)	£9.00	Euro CD Volume 1	£13.00	Multimedia Backdrops	£15.00
AGA Experience 3 (NFA)	£13.00	Euro CD Volume 2	£13.00	Network 2	£13.00
AGA Toolkit '97	£9.00	Flyin' High	£24.00	Octamed Sound Studio	£20.00
Amiga Desktop Video 2	£13.00	Fontamania	£10.00	Personal Suite	£18.00
Amiga Developers	£13.00	Geek Gadgets 1 or 2	£13.00	Personal Paint 7.1	£23.00
Amiga Repair Kit	£35.00	Graphics Sensations 1	£18.00	Prima Shareware	£5.00
Aminet 18,19,20,21, or 22	£12.00	Gif Sensation Double Cd	£18.00	Retro Gold	£10.00
Aminet Set 1, 2, or 3	£17.00	Giga Graphics (4CD)	£10.00	Scene Storm	£10.00
Aminet Set 4 or 5	£27.00	Global Amiga Experience	£15.00	Sci-fi Sensation 2	£18.00
Amy Resource Europe	£15.00	Golden Demos	£15.00	Sound & Graphics	£18.00
Animation (Weird Science)	£9.00	Guinness Disc Of Records	£18.00	Sounds Terrific/Octamed 6	£18.00
Anime Babes (18)	£16.00	Hidden Truth	£24.00	Speccy '97	£15.00
Arcade Classics Plus	£13.00	Horror Sensations (18+)	£18.00	System Booster	£18.00
Artworx	£9.00	Illusions In 3D	£9.00	Time & Reckoning	£18.00
Assassins 2	£11.00	Imagine PD 3D	£15.00	Trapped 2	£20.00
Assassins 3	£14.00	Insight Dinosaurs	£5.00	UPD Gold	£13.00
Big Red Adventure	£18.00	Into-The-Net	£15.00	Uropa2 - Ulterior Colony	£25.00
C64 Sensations Vol.2	£17.00	Kara Collection	£10.00	Utilities Experience	£14.00
CAM (2CD)	£22.50	The Learning Curve	£18.00	1078 Weird Textures	£13.00
Card Games PC/Amiga	£15.00	Light ROM 4	£19.00	Wordworth 6.0	£40.00
Weird Science ClipArt	£9.00	Light ROM 5 (3CD)	£24.00	Wordworth 6.0 Office	£48.00
Colour Library	£13.00	Light ROM Gold	£14.00	Workbench Add-ons	£21.00
Dem Rom	£9.00	Magic Publisher	£30.00	World Info 95	£18.00
Emulators Unlimited	£17.00	Magic W/Bench Enhancer	£9.00	Zoom 2	£19.00

Part Exchange

Money off your new hardware purchases!

Call for pricing now to part exchange your old items, and get real value for your unwanted monitors, printers, memory, computers, etc.

Second User Bargains Available Now!

Totally refurbished units, with a three month minimum warranty. Call for current stocks.

Please note, we do not buy items for cash. Goods can only be exchanged against a more expensive purchase.

Power Units

PRIMA
ATOM
HEAVY DUTY PSU

- High Quality 200 Watt PSU
- Colour Co-Ordinated Casing
- 4 Times Standard Power

Now Only £59.00

Standard Amiga PSU £29.00

Memory / Acc.

Prima A1200 4Mb RAM	£60.00
Prima A1200 8Mb RAM	£75.00

Includes Battery Backed Clock.
Add £25.00 For 33MHz Co-Pro

1Mb 30 Pin (1*9) 70ns SIMM	£7.00
4Mb 30 Pin (1*9) 70ns SIMM	£21.00
4Mb 72 Pin (1*32) 60ns SIMM	£15.00
8Mb 72 Pin (2*32) 60ns SIMM	£18.00
16Mb 72 Pin (4*32) 60ns SIMM	£38.00
32Mb 72 Pin (8*32) 60ns SIMM	£78.00
256 x 4 DRAM (DIL Type) (each)	£5.00
Prima A500 512k RAM No Clock	£17.00
Prima A500+ 1Mb RAM	£25.00
Prima A600 1Mb RAM No Clock	£25.00

Lower Prices!

A1200 Accelerator Cards

Blizzard 1230-50	£90.00
Blizzard 1260-50	£319.00
Blizzard SCSI Module	£70.00
200MHz Impulse Upgrade	£CALL
Viper IV 42MHz With 4MB	£79.00

Storage

iomega
Zip Drive
Only
£135.00

- Includes One 100mb Cartridge
- Fast SCSI Interface Version
- Includes Cable & Amiga Zip Tools

Zip Drive 100mb Media (each)	£10.00
Squirrel to Zip Adapter	£18.00

A SCSI Interface may be required at an extra cost. See Squirrel section on this page, above right.

A500/A500+ Internal Drive	£35.00
A600/A1200 Internal Drive	£35.00
A4000 Internal Drive	£75.00
Golden Image External Drive	£42.00

WIZARD
SATURN
External 1mb Floppy Drive for all Amigas
only £39.00

Free Dir. Opus 4.12!

Graphics

Scanners

Power Hand Scanner Mono V4.	£70.00

256 greyscale on AGA Amigas. 64 Greyscale on others.

Epson GT5000 Flatbed Scanner	£260.00

2400 DPI Output. 24 Bit Colour. Requires Software Below

Epson GT8500 Flatbed Scanner	£400.00

3200 DPI Output. 32 Bit Colour. Requires Software Below

Amiga Epson Scanning Pack	£50.00

Includes Full Image Scanning Software & Required Cable

Genlocks

Lola L-1000 Genlock	£115.00

Mix video & graphics with ease. supports AGA as standard

Lola L-1500 Genlock	£175.00

Composite video out. 2 Sliders, 1 fade to black

Pro-GRAB SVHS 24RT Plus

- 24 Bit Colour Realtime Digitiser
- Easy Set-Up With Full Software

Only £99.00

Pro-Grab PCMCIA Adapter £40.00

Modems

DIAMOND MULTIMEDIA SupraExpress

SupraExpress 56 Voice

- BABT & CE Approved
- Voice Capabilities
- 56,000 Data
- 14,000 Fax
- 5 Year Warranty

Only £86.00

SupraExpress 36 Voice

- BABT & CE Approved
- Voice Capabilities
- 36,600 Data
- 14,000 Fax
- 5 Year Warranty

Only £61.00

Amiga Surfware Internet Pack
THE COMPLETE SOFTWARE SUITE FOR ALL YOUR INTERNET NEEDS. INCLUDES 30 DAYS FREE INTERNET ACCESS, EXCLUDING LOCAL CALL CHARGES
Only £10 Just £6.00 with any modem

Miscellaneous

Zydec ZyFi Speakers

ZyFi
40 Watt PMPO
Mains Powered
Only
£16.00

ZyFi 2 Pro
120 Watt PMPO
Mains Powered
Only
£43.00

ZyFi To Amiga Cable	£5.00

Chip Upgrades

68882 Co-Pro 33MHz PLCC	£25.00
68882 Co-Pro 50MHz PGA	£40.00
Agnus 2Mb 8375-16 (A500+)	£28.00
CIA 8520 I/O Controller	£19.00
Kickstart 2.04/2.05 ROM Chip	£25.00

Miscellaneous

A520 TV Modulator	£35.00
Zipstick Super Pro Joystick	£13.00
Wizard 560DPI Mouse	£13.00
Quality Mousemat (4mm)	£2.50
3.5" Floppy Drive Head Cleaner	£2.00
80 Cap. Banx Lockable Disk Box	£10.00

Printers

Free printer drivers supplied where possible. Some printers require additional software. See software section above for discounted prices. Please contact us for full details.

All our printers include a free data cable worth £5.00!

Canon

BJC-30 Colour Inkjet	£160.00

720 x 360 DPI Mono Printer. 30 Page ASF Built-In

BJC-80 Colour Inkjet	£189.00

720 x 360 DPI Colour Printer. 30 Page ASF Built-In

BJC-250 Colour Inkjet	£136.00

720 x 360 DPI. Mono & Col. Carts Supplied. 80 Page ASF

BJC-4300 Colour Inkjet	£186.00

720 x 360 DPI. Optional Colour Scanner Cart. 5ppm Mono

BJC-4550 Colour Inkjet	£258.00

720 x 360 DPI. Up to A3 Colour Printing. Dual Cart Printing

BJC-620 Colour Inkjet	£222.00

720 x 720 DPI. Four Separate Cartridge Colour Printing

CITIZEN COMPUTER PRINTERS

ABC 24 Pin Dot Matrix	£110.00

300 DPI. 50 ASF Built-In. Optional Tractor Feed at £35.00

ProJet-IIC	£130.00

300 x 300 DPI Colour Inkjet Printing. 70 Sheet ASF Built-In

Printiva 600C	£292.00

600 DPI Colour, 1200 DPI Mono. Advance Micro Dry Tech.

EPSON

Stylus 400 Colour Inkjet	£169.00

720 x 720 DPI. 4ppm Black, 3ppm Colour. 100 Sheet ASF

Stylus 600 Colour Inkjet	£218.00

1440 x 720 DPI. 6ppm Black, 4ppm Colour. 100 Sheet ASF

Stylus 800 Colour Inkjet	£313.00

1440 x 720 DPI. 8ppm Black, 7ppm Colour. 100 Sheet ASF

HEWLETT® PACKARD

HP-340C Portable Colour	£180.00

600 x 300 DPI Mono, 300 x 300 DPI Colour. 2ppm Mono

HP-400C Colour	£133.00

600 x 300 DPI Mono, 300 x 300 DPI Col. Both Carts Inc.

HP-690C Plus Colour	£200.00

300 x 300 DPI Colour Printing. Now Even Faster.

HP-870CXI Colour	£256.00

600 x 600 DPI Mono, To 8PPM, 600x300 Colour To 4PPM

HP-6L Mono Laser	£279.00

600 DPI, 1Mb RAM, 6 Pages Per Minute Printing

Dual Parallel Printer Swtchbox	£13.00

Includes cable. Other types & specifications also available

Cables

This is only a small selection. Please call.

23 Pin To 15 Pin Multisync Adapter	£7.00
9 Pin Mouse/Joystick Extension	£5.00
Mouse/Joystick Switcher	£14.00
Surge Protector 4 Plug Adap.	£15.00
Parallel Printer Cable 1.8M	£5.00
Parallel Printer Cable 4.5M	£12.00
Parallel Printer Cable 10M	£20.00
Parallel Bi-Di Printer Cable 1.8M	£5.00
Parnet Cable 25 Pin D Type	£15.00
Null Modem Cable 25DF-25DF	£10.00
Modem Cable 25DF-25DM	£10.00
RGB 9 Pin Monitor Cable Extension	£15.00
Multisync Monitor Cable Ext.	£11.50
1438 23 Pin To 15 Pin D Adap.	£10.00
Amiga To Scart Cable (CM8833 Mk1)	£10.00
9 Pin Extension Cable 3M	£7.00
Amiga to Philips 8833Mk II	£10.00
25D To Centronics Male	£12.00
Centronics Male To Female 1M	£15.00
Centronics Male To Male 1M	£15.00
SCSI 3 Device Internal Cable	£14.00
SCSI 7 Device Internal Cable	£17.00
Micro D Male To Micro D Male	£33.00
Micro D Male To Centronics Male	£33.00
25D To Centronics Female	£18.00
Internal 50 Way SCSI To External	£13.00
Amiga A600/A1200 2.5" IDE Cable	£10.00
Dual 3.5" IDE Cable	£10.00
A600/A1200 2.5" To 3.5" Cable Set	£20.00

Consumables

Delivery just £2.00 on small items under £20.00

Canon

BC01 BJ10/SJ48 Black	£17.00
BC02 BJ200 Black	£18.00
BC05 BJC210 Black	£20.00
BC06K BJC240 Photo Kit	£26.00
BC06 BJC240 Photo Cart	£20.00
BC09F BJC240 Fluores.	£26.00
BC10 BJ30 Head & Ink	£30.00
BC11 BJ70 Heat & Cart	£32.00
BC20 BJ4x00 Head&Black	£32.00
BC21 BJ4000 Head + Inks	£35.00
BC22 BJC4200 Photo Cart	£27.00
BC22K BJC4200 Photo Kit	£37.00
BC29F BJC4200 Fluores.	£32.00
BCI10 BJ30 Black 3 Pack	£11.00
BCI11BK BJ70 Black 3 Pk	£9.00
BCI11C BJ70 Colour 3 Pk	£15.00
BCI21BK BJC4000 Black	£5.00
BCI21C BJC4000 Colour	£14.00
BJI20B BJC6x0 Black	£5.00
BJI20C BJC6x0 Cyan	£6.00
BJI20M BJC6x0 Magenta	£6.00
BJI20Y BJC6x0 Yellow	£6.00
BJI642 BJ300/330 Black	£11.00

Refills/Re-Inks

Re-Ink Ribbon Spray	£10.00
Black Ink Cart Refill 50ml	£8.00
3 Colour Ink Refill 75ml	£13.00

Citizen

ABC/Swift Mono Ribbon	£5.00
ABC/Swift Colour Ribbon	£13.00
Projet IIc Colour Cart.	£30.00
Projet IIc Mono Twin Pack	£7.00
Project IIc Mono + Head	£22.00
Printiva Black	£6.00
Printiva Cyan	£6.00
Printiva Magenta	£6.00
Printiva Yellow	£6.00
Printiva Silver	£16.00

Epson

Styl. Col. 400/600 Black	£19.00
Styl. Col. 400/600/800 Col	£21.00
Styl. Col 800/1520 Black	£21.00

Hewlett Packard

Deskjet 340 Hi-Cap Black	£21.00
Deskjet 5x0 Series Black	£24.00
Deskjet 5x0/340C Colour	£26.00
Deskjet 6x0 Series Black	£24.00
Deskjet 6x0 Series Colour	£26.00
Deskjet 8x0 Series Black	£24.00
Deskjet 8x0 Series Colour	£26.00

Paper

500 Sheets (Fanfold/Single)	£5.00
1000 Sheet (Fanfold/Single)	£9.00
100 Sheets Epson 720dpi	£13.00
200 Sheet Canon Hi-Res	£25.00
500 Sheet HP Bright White	£11.00

3.5" Floppy Disks

Bulk DSDD

10x	£3.50	100x	£27.00
30x	£10.00	200x	£50.00
50x	£15.00	500x	£115.00

Branded DSDD

10x	£5.00	100x	£42.00
30x	£14.00	200x	£77.00
50x	£22.00	500x	£176.00

Bulk DSHD

10x	£4.00	100x	£30.00
30x	£11.00	200x	£56.00
50x	£17.00	500x	£130.00

Branded DSHD

10x	£6.00	100x	£45.00
30x	£16.00	200x	£83.00
50x	£24.00	500x	£190.00

500 Disk Labels	£7.00
1000 Disk Labels	£10.00

miga X-Cad available FREE from our Web site! - http://www.firstcom.demon.co.uk/

NTRE
ineers can
obligation
f repair on
y computer
ery tariff of
harged or
our large
can also
tems to be
rier for an
of £11.00

SCSI-II
£45.00
y SCSI device,
eparately

£99.00
000/2000 etc.
oft
EMS
New!
Port
an Standard
Data Transfer
n Ready!!!
t with modem)

Delivery £2.00 per title, or £5.00 for 3+

£9.00
£28.00
£24.00
£24.00
al FX1 £18.00
ps £15.00
£13.00
udio £20.00
£18.00
£23.00
£5.00
£10.00
£10.00
£18.00
£18.00
amed 6 £18.00
£15.00
£18.00
£18.00
£20.00
£13.00
lony £25.00
£14.00
s £13.00
£40.00
e £48.00
s £21.00
£18.00
£19.00

eous
rs

£5.00
£25.00
£40.00
£28.00
£19.00
£25.00
£35.00
£13.00
£13.00
£2.50
er £2.00
Box £10.00

ivery just £2.00
n small items
under £20.00

3.5"
Floppy
Disks

00x £27.00
00x £50.00
00x £115.00
SDD
00x £42.00
00x £77.00
00x £176.00
00x £30.00
00x £56.00
00x £130.00
SHD
00x £45.00
00x £83.00
00x £190.00
els £7.00
els £10.00

CARE QUALITY & SERVICE

QUALITY INK JET & BUBBLE JET REFILLS

CARE QUALITY INKS

INK RUN OUT? RIBBON WORN OUT?

Don't throw that printer cartridge away, refill it. No need to spend unnecessary money on a complete new one, when it's only the ink or ribbon that needs replacing. Save pounds and help the environment. Our ink refill kits use top quality inks suitable for most printers including: CANON BJ/BJC RANGES, H/P DESKJETS, CIT, PROJET, OLIVETTI, EPSON STYLUS / STYLUS COLOURS, and contain all you need to refill your existing cartridge. Black refill kits contain 120ml pure black ink, price £16.99. Tri-colour refill kits contain 60ml each of yellow, magenta, cyan, price £24.99. Once you have the kit you can make future savings by ordering the ink only.

'Ink only' and larger quantities prices on request.

Print-head recovery fluid *for unblocking nozzles, £6.99*

Ink Refill TRIAL STARTER PACKS *only £17.50*

If you have never refilled before, then try our Trial Starter Pack. Each pack contains all you need to refill your existing cartridge, including 30ml each of yellow, magenta, cyan and black ink. Agreat gift idea!

PRINTER RIBBONS	NORMAL INK			T-SHIRT PRINTING	
	complete colour ribbon	one reload	five reloads	complete colour ribbon	complete black ribbon
Citizen Swift/ABC/240 etc	£11.95	£6.99	£29.95	£19.99	£9.99
Panasonic KXP2123/2124/2180	£9.99	£6.99	£29.95	£18.99	-----
Panasonic KXP2135	£9.99	£6.99	£29.95	£18.99	-----
Star LC200 9pin	£9.99	£6.99	£29.95	£18.99	£9.99
Star LC24-10/20/200	£9.99	£6.99	£29.95	£18.99	£9.99
Star LC24-30/LC240	£8.99	£5.99	£24.99	£18.99	-----
Seikosha SL95	£14.95	£6.99	£29.95	£24.99	£9.99

To reload a ribbon is easy, just remove the top, take out the old ribbon & reload it with a new one. MANY MORE RIBBONS & RELOADS IN STOCK.

DON'T FORGET TO STATE PRINTER TYPE

Prices include VAT & postage. To order send cheques/POs payable to:

CARE PRODUCTS

Dept CUA, 15 Holland Gardens, Watford, WD2 6JN

or use Visa/Mastercard or Education order.

Tel order line 01923 894064

Fax ORDER LINE 01923 672102

AMIGA REPAIRS

FIXED PRICE ONLY £38.99 Incl. (A500/+,600 and CD32 Only

- *Price includes PARTS, LABOUR & VAT
- *90 Day Parts and Labour Warranty
- *24 Hour turn-around on most repairs
- *Includes FULL DIAGNOSTIC, SERVICE & SOAK
- *Upgrades fitted free with repair
- *If drive/keyboard needs replacing + £10.00 (add £6.00 for return carriage)

EST. 16 Years

AMIGA A1200 Repairs only £48.99 Fully Inclusive

******Repairs while-you-wait add £10.00******

COMPONENT SPARES

We are the largest distributor and retailer of Amiga spares in the UK. with an inventory of some 150,000+ parts. Large quantity discounts and catalogue available to trade.

LOW PRICE

SPECIAL OFFERS

WE CAN SUPPLY & STOCK EVERY AMIGA SPARE

A500 Internal Drive	£28.99	A500/600/1200 PSU	£25.99
A600/1200 Int.Drive	£28.99	A1200 Keyboard	£34.00
KickStart 2.05	£19.90	A600 Keyboard	£19.00
Super-Buster IC	£15.00	A500 M/Board v6	£58.00
A520 Modulator Xchg	£18.00	CD-32 PSU	£25.00
8520 CIA	£12.00	CD-32 CDROM Drive	£35.00

CHIPS | KEYBOARDS | CASES | PSUS | DRIVES | PCBS

AMIGA PC KEYBOARD ADAPTOR (All Amigas) £25.00 PC Keyboard £16.00

Postage & Packing add £3.00

DART Computer Services
105 London Road
LEICESTER
LE2 0PF

SALES
(0116) 2470059
FAX (0116) 2558643

The Guild of Master Craftsmen

DART Computer Services

Official Government & Educational orders welcome

Tel: 01543 250377

or send cheques to:

Owl Associates Ltd

Dept 570, Owl House, 5 The Brambles, Lichfield, Staffs, WS14 9SE

Normal UK Delivery £2.00, Next Day £7.50
Prices INCLUDE VAT (@17.5%) E& OE

Printer Ribbons

BLACK	1 off	2+	5+	10+
Amstrad DMP 2000/3000	2.80	2.65	2.45	2.25
Amstrad PCW8256/LQ3500	2.85	2.70	2.50	2.30
Citizen 120D/LSP10/Swift 24/9	2.85	2.70	2.50	2.30
Epson LQ100	4.10	3.95	3.75	3.55
Epson FX/MX/RX80/FX/LX800	2.90	2.75	2.55	2.35
Panasonic KXP1123/1124/1140	3.46	3.31	3.11	2.91
Panasonic KXP1080/1180/90	2.89	2.74	2.54	2.34
Panasonic KXP2123/2124/2180	4.95	4.80	4.60	4.40
Star LC10/20/100	2.29	2.14	1.94	1.84
Star LC200	3.00	2.85	2.65	2.45
Star LC24-10/20/200	2.86	2.71	2.51	2.31
COLOUR				
Citizen 224, 240, SWIFT 24/9	11.95	11.80	11.60	11.20
Panasonic KXP2123/2124/2180	10.63	10.48	10.28	9.88
Star LC10/20/100	6.00	5.85	5.65	5.25
Star LC200	9.78	9.63	9.43	9.03
Star LC24-10/20/200	9.63	9.48	9.28	8.88

These are just a small selection of our Ribbons - Ring for those not listed

Ring us and *WE WILL BEAT* all other Ribbon prices

Laser Tones

HP Laserjet II/III	40.00	each
HP Laserjet IIP/IIIP	45.00	each
HP Laserjet 4L, 4LM	50.00	each
HP Laserjet 4, 4M	71.00	each
Panasonic KXP-4410/4430	26.00	each
Panasonic KXP-4400/5400	17.00	each

Ring for Toners not listed

Miscellaneous Items

100 3½" Disk Labels	1.99	Mouse House	2.99
1000 3½" Disk Labels	8.99	Glass Screen Filter 17"	29.99
1000 White Tractor Feed 3½" Disk Labels	10.99	14"/15"	16.99
3½" Disk Cleaning Kit	2.99	Python 5 Joystick	10.99
Parallel Printer Cable	3.99	Warrior 5 Joystick	10.99
Mouse Mat	2.99	Super Warrior Joystick	15.99
		Skymaster Joystick	29.99

Dust Covers - Ring for prices

Branded CD-R

All supplied with cases

1 - 9	2.70	each
10 - 19	2.55	each
20 - 49	2.45	each
50 - 99	2.30	each
100+	2.15	each

3½" Disks

	Bulk		Branded
	DD	HD	HD
10 Disks	£5	£6	£8
25 Disks	£10	£11	-
50 Disks	£16	£18	£24
100 Disks	£29	£33	£46

All Disks Certified 100% *ERROR FREE* & Include *FREE* Labels

Disks & CD Boxes

3½" 100 Capacity Box	5.99
3½" 10 Capacity Box	1.50
2 Capacity CD Cases	0.75

Inkjet / Bubblejet Cartridges

	1 off	2+
Apple Stylewriter	16.30	16.10
Canon BJ 10, 10ex, 10sx, 20	16.30	16.10
Canon BJ 30, 70 blk (Pk3) BC1-10BK	10.00	9.80
Canon BJ 70 Blk (Pk3) BC1-11BK	10.00	9.80
Canon BJ 70 Col (Pk2) BC1-11C	11.00	10.80
Canon BJ 200/10/30/40 Black	16.30	16.10
Canon BJC 210/40 Colour	24.30	24.10
Canon BJ 300/30	7.00	6.80
Canon BJC 600/10/20 Blk, Cy, Mag or Yel	3.00	2.90
Canon BJC 4000/100/200	27.00	26.80
Canon BJC 4000/100/200 Hd+Blk+Col	41.00	39.80
Canon BJC 4000/100/200 Small Black	7.00	6.80
Canon BJC 4000/100/200 Small Colour	11.00	10.80
Commodore MPS1270	10.80	10.60
Commodore IP3300 Blk Head & Refill	39.00	38.80
Commodore IP3300 Blk Clip.In & Refill	15.00	14.80
Commodore IP3300 Colour	33.00	32.80
Epson Stylus 400,800,800+,1000 Black	7.00	6.80
Epson Stylus Color, Pro XL Black	10.00	9.80
Epson Stylus Color, Pro XL Colour	14.00	13.80
Epson Stylus 820, Color, II/IIS Black	11.00	10.80
Epson Stylus 820, Color, II/IIS Colour	14.00	13.80
Epson Stylus Color 200 Black	11.00	10.80
Epson Stylus Color 200 Colour	14.00	13.80
Epson Stylus Color 400,600 Black	10.00	9.80
Epson Stylus Color 400,600 Colour	22.00	21.80
Epson Stylus Color 500 Black	10.00	9.80
Epson Stylus Color 500 Colour	14.00	13.80
HP Deskjet 400,500/10/20/40/50/60 Black	21.00	20.80
HP Deskjet 400,500/40/50/60 Tri-Colour	22.50	22.30
HP Deskjet Portable, 310/20/40 (High Cap.)	19.50	19.30
HP Deskjet 600/60/90/93/94 Black	23.00	22.80
HP Deskjet 600/60/90/93/94 Tri-Colour	24.00	23.80
HP Deskjet 600/60/90/93/94 Photo Tri-Colour	31.80	31.60
HP Deskjet 820/50/55/70 Black	24.00	23.80
HP Deskjet 820/50/55/70 Tri-Colour	25.50	25.30
HP Thinkjet/Quietjet	10.80	10.60
Star SJ 48	16.30	16.10

We also stock other cartridges & refill kits suitable for most inkjet/bubblejet printers Ring for details & prices for those not listed

Inkjet / Bubblejet Refill Kits

Apple Stylewriter	8.50 for 2 x 20ml Refills
Canon BJ 10/10ex/20/200/230	8.50 for 2 x 20ml Refills
Epson Stylus 400/800/1000	8.50 for 2 x 20ml Refills
Epson Stylus Color Black	8.50 for 2 x 12ml Refills
Epson Stylus Color Colour	10.50 for 9ml of each Col
HP Deskjet 500 Series Black	11.00 for 2 x 40ml Refills
HP Deskjet 500 Series Tri-Colour	12.00 for 12ml of each Col.
Star SJ48	8.50 for 2 x 20ml Refills

ASA ☑
KEEPING
TABS
ON ADS
THE ADVERTISING STANDARDS AUTHORITY 2 TORRINGTON PLACE LONDON WC1E 7HW

Final Odyssey

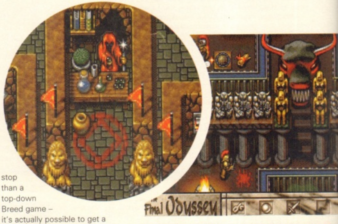
■ **Price: £29.99** ■ **Publisher: Vulcan Software © 01705 670269**

After a short stack of mediocre floppy releases and the announcement of a formidable stack of new games, Vulcan's shipping department went rather quiet... until now.

▶ **The amount of detail in Final Odyssey is impressive, proving that the ancient art of 2D spite design is far from dead.**

The company restructured a bit and tapped Weird Science to handle their distribution and some advertising, freeing them up to have more time to pursue and prod their programmers to finish games.

Some of the promised titles were dropped, some more added, and now Vulcan seems to be on a roll again. Vulcan Software's Australian brain drain continues. Following the recent Uropa2 from Austex Software, they've turned their sights again to the southern hemisphere and picked up Ozlander Peter Spinaze's Final Odyssey, the next entry in Vulcan's CD game series.

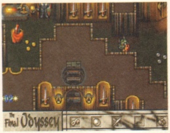


Come sail away

In Final Odyssey, you take on the role of Theseus. For years, your people have had to send young girls to their doom at the hands of the evil Minotaur in order to placate him. But after a time, you get fed up with the senseless waste of so many virgins, and set out not to placate, but to pummel the Minotaur.

To do that, you'll need to make your way through his insidious Labyrinth. You start armed only with a reliable but unimpressive crossbow, and must collect more weaponry, avoid traps, solve puzzles, collect money, and rescue the aforementioned maidens. At the end lies the Minotaur.

Final Odyssey could be considered "Alien Breed Goes To Valhalla," although the action is more reminiscent of the former, right down to the baddies that jump out of the floor at you. The action is a little less non-stop than a top-down Breed game – it's actually possible to get a breather.

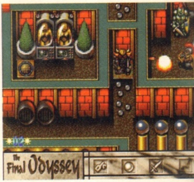


After all, the Minotaur is on the defensive, he's perfectly willing to let you wear yourself out scrambling around shooting at goblins and pulling switches. On the other hand, there's a very Breed-inspired "Defuse the bombs before time expires or lose a life" subgame to contend with.

As you travel along, you'll also encounter scrolls left behind by those who have tried and failed to end the Minotaur's reign of terror. They usually give you clues to puzzles, although some are warnings or other bits of detail.

Vulcan's trademark has always been in digitized speech, and with their dedication to CD-ROM you can expect as much of it as possible. Surprisingly, most of the speech is confined to the online manual, which shows up on the screen and is dictated to you in a rather pleasant female voice.

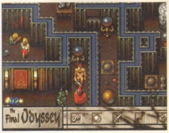
Unfortunately, it's actually a bit distracting and only slowed me down in trying to read through the relevant instructions, but if you want to close your eyes and let the dreamy voice tell you all about the game, you're welcome to. I was surprised that the ingame text (such as from the reading of scrolls) was not also spoken to me.



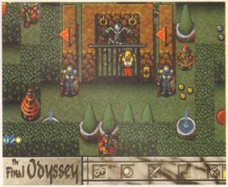
Battling it out

Final Odyssey plays in a top-down 3D view, with brightly colorful graphics which have been given a great deal of detail. As Theseus, you have to get in, arm yourself well enough to take on the Minotaur, and eventually find him, somewhere on Level 5.

In addition to the monsters that get in your way, there are a limited number of crea tures you can pleasantly interact with, askin for information and getting assistance along the way. You'll want to check out the manua before playing to get the definition of the icons used in the questioning process, as



▲ Despite the old fashioned top-down approach, the graphics still stand out as neat and stylish, instantly elevating the game above the likes of the Valhalla series.



"Question 1" and "Question 2" are hardly illuminating.

I was pleasantly surprised to see that Final Odyssey doesn't get easily caught in a lot of "sameness." Maze-based games can often get simply boring when you stop caring about what's behind another bland corner. The main corridors are not randomized, although there are subgames which are different every time you encounter them.

So you can plan out how to disarm the right traps in the right order and get the same results every time you play, but there's really no such thing as a good strategy for the subgames, which involve destroying the guards in a hedge maze and disarming the time bombs they drop before the time expires.

Despite its origins in mythology, Final Odyssey pulls a lot of inspiration from magic, present technology, and even some future technology. There are hologram walls, teleporters, boulders that turn into bad guys, and a hero's arsenal including a chain gun and bombs. Rather than seeming simply like an uninspired author reaching for lots of clichés, it all comes together nicely in this game.

The attention to detail is fairly impressive. Crossbow bolts stick in walls and stay stuck for quite some time (rather than simply disappearing when they scroll offscreen), the monsters look eerie in a campy sort of way as they ooze towards you, and brightly coloured rotating turrets shoot fireballs at you with deadly accuracy.

Giving your all

Final Odyssey asks rather little of your Amiga short of a double-speed CD-ROM drive. 2 megs of RAM (any sort) are required, 1 meg chip minimum. ECS and the 68000 are supported, which means even a limping A500 can handle the game. No installation to HD is required, although you'll want to save your games there. The game has a healthy allotment of 10 save slots.

This is good, because the real challenge in Final Odyssey is not so much the puzzles, or ammunition management (although you should treat bombs like gold), or in finding the right soul to help you out, but just in living long enough to get to the end. There are so many little traps in Final Odyssey – an arrow here, a floor spike there – that your health and eventually your extra lives get whittled away before you know it.

The maps in Final Odyssey can get expansive at times, but there's little reason to keep a pencil and paper nearby – usually you are rewarded for your explorations fairly quickly and don't need to do an inordinate amount of backtracking. Transitions between maze screens (they scroll up to a certain point, but you enter different regions from time to time) are nice and snappy, but other changes (like altering the maze due to flipping a switch, or the nuking of the hedge maze if you fail to stop the bombs) suffer from the "extremely long fade" illness I've seen in other games, like the AGA conversion of Civilization. It really breaks up the rhythm of the game.

Breaking conventions

I've played a lot of games, and it's nice to see that every now and then an author will make a break with common gaming notions. In Final Odyssey, as you collect food to boost your health, you can actually go above the top level of strength and start working on another "life" worth of health.

I wish more game designers would consider this – it's hardly less realistic to think that you could start building another "life" than it is to have multiple lives in the first place, which Theseus certainly does.

Spinaze broke another rule, but one I'll have to condemn rather than compliment him for. The monsters chase you, typically with some less than stellar AI – but that's not my problem. My problem is that they chase you at exactly the same speed that you move. It's not such a bad thing if some of your enemies are your equal, but from the days of Pac Man on, it's been a well established fact that speed differentials make for more tension.

As it stands, Theseus can flee most trouble – the monsters can't gain on him, and they have to stop to fire a weapon, so unless you get outmanoeuvred, the monsters are less of a threat than they should be. (For the record, Pac Man was slower on straightaways but faster on corners) I was disappointed when I realized what was going on.

Final Odyssey is a healthy amount of fun to play. It's visually stimulating, with adequate sound effects and enough incremental rewards as you progress through the labyrinth to keep you hunting for more. It's a little disappointing that there isn't a greater variety of monsters to fight or that the CD-ROM wasn't used to greater advantage, but in all, especially considering my lack of appreciation for paper-and-pencil mazes, I had a great time. There's enough arcade action to go around without becoming a straight shootemup, but it's by no means "cerebral."

Peter Spinaze was a one-man band as far as the creation of the game is concerned, and as far as I'm concerned he did an overall excellent job as designer, programmer, artist, and effects man. Where these one-man teams always seem to have trouble is their 3D work, and in this case if just a few shots had been cut out of the 3D intro movie, it would have put a much better face on the game as a whole.

From a general programming standpoint, the game has an annoying habit of slowing down when too many monsters get onscreen at once, regardless of the speed of your machine – a different timing mechanism would have been appreciated. Aside from that, I yield to the colossal effort completing a game entirely by hand entails.

Bottom line, I'm impressed by this release. It's done a good job of balancing game quality and machine requirements – I am one of the most stalwart advocates of high-end Amigas you'll find, but on the other hand I can appreciate a well-done, low-resource job when I see one. After an uninspiring launch to the series (Strangers), Vulcan's line of CD releases have indicated some very good things for the future, and I hope to see Peter Spinaze share another view of another world sometime soon. ■

Jason Compton

FINAL ODYSSEY

■ Workbench version	2+	Graphics	90%
■ Number of disks	CD-ROM	Sound	85%
■ RAM	2Mb	Lastability	80%
■ Hard disk installable	N/A	Playability	92%

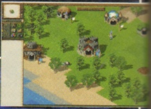
OVERALL

Impressive stuff, reminiscent of old Bitmap Brothers fare.

87%

Sadeness

Coming soon from Sadeness Software, the ultimate Amiga CDROM games!



Incredibly detailed H-Res graphic

FOUNDATION

The Ultimate Amiga Strategy Wargame!

Due for release in November 1997. **Foundation** will set new standards for the Real-Time strategy war/conquest games! Featuring many unique features not seen in any game for any platform!

Combining the very best elements of **The Settlers 2, Warcraft 2, Command and Conquor, Megalomania** along with some totally original ideas and features - **Foundation** will set new standards for strategy games on all computers.

Brief Feature List:

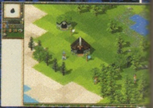
- ECS, AGA and CyberGFX fullly supported.
- 1 player versus 1, 2 or 3 computer controlled players.
- over 800 frames rendered intro
- Full control over every friendly unit
- Random level generator for intinite levels!
- Custom made 24bit quality mission/menu screens.
- Advanced enemy Artificial intelligence.
- Realistic rendered objects such as trees, rocks etc.
- Serial and TCP/IP links planned
- 2 player Split-Screen mode.
- Over 50 meg of Sound and Graphics.
- Comes with a Map/Mission editor.
- Extensive full-colour on-line manual/help.
- Mug-Shots included from Amiga owners!
- Advanced Fire/Smoke/Shadow effects.
- High-Res graphics-absolutely amazing!

If you would like to be one of the very first owners of this massive new Amiga game, you can fill in the pre-order form below **(NOTE: No money will be debited until your order is sent!)**. This will ensure that your order is despatched on the very day of release!

Release Date: January 1998 • £29.95 inc p&p • http:/WWW.sadeness.demon.co.uk/foundation.html

SYSTEM REQUIREMENTS: Any Amiga - 2 Meg RAM minimum Double-speed CDROM. AGA and Graphics cards fully supported and enhanced

Stunning 24bit intro/menu screens!



Full battle and management control!

onESCAPEE

Full 256 colour AGA graphics

Due for release in October 1997. **onEscapee** will set new standards for Action/adventure games!

Combining the very best elements of classic games as **Prince of Persia, Another World** and **Flashback** along with some totally original ideas and features - **onEscapee** will set new standards for action/adventure games games on all computers (PC and Amiga versions under development).

Brief Feature list:

- AGA required and CyberGFX support planned.
- 5 minute long, atmospheric 9meg Intro!
- 100% multi-tasking system friendly.
- Incredible, atmospheric digital music score!
- Cave, City, Underwater and space levels + more!
- Control choice of Keyboard, Joystick or Joypad.
- A great variety of different enemies - with intelligence.
- 4 years in development by a large team!
- 100% pure assembly language
- Thousands of hand-drawn animation frames!
- Can be used on Double-scanned screens.
- Complex animations are custom-rendered!
- Logical puzzles
- Full use of AGA chipset - using 256 colours.
- Rippling water, sweeping light beams etc.
- Amazing film-quality cut-scenes!

If you would like to be one of the very first owners of this massive new Amiga game, you can fill in the pre-order from below **(NOTE: No money will be debited until your order is sent!)**. This will ensure that your order is despatched on the very day of release!

Release Date: OUT NOW!! • £29.95 inc p&p • http:/www.sadeness.demon.co.uk/foundation.html

SYSTEM REQUIREMENTS: Any Amiga - 4 Meg RAM minimum. Double-speed CDROM or better. Graphics card support planned for the future.

600+ frames of character animation!

Full atmospheric digital music score!

IF YOU WOULD LIKE TO PLACE AN ORDER FOR EITHER GAME OR RECEIVE MORE INFO ABOUT THEM - PLEASE TICK THE CORRECT BOX, AND FILL-IN YOUR DETAILS. Please send completed form (telephone/email us) to: Sadeness Software - 13 Russell Terrace - Mundesley • Norfolk • NR11 8LJ • UK Tel: (01263) 722169

Place a Pre-Order for **FOUNDATION** ☐ Recive further info about **FOUNDATION** ☐ Place a Pre-Order for **onEscapee** ☐ Receive further info about **onEscapee** ☐

Please fill in your details in BLOCK CAPITALS. Thanks.

Name
Address
Postcode
Country
Credit Card Number
Card Expiry Date
Issue Number (Switch only)
Telephone Number
Email
Your Machines Specs

Sword

■ Price: £14.99 ■ Developers: Serio-Comic ■ Published: Titan ■ Distributed: Epic ✆ 0179 3490988

What do you get if you cross Bub and Bob from Rainbow Islands with George Formby? The main character from Sword...

When I heard the title of this game, it conjured up many images in my mind. Would it be an intricate role-playing fantasy adventure, or a mad hack and slay bloodbath? No, Sword is in fact a platform game. Swords barely get a look in.

Two-dimensional platform games have been somewhat out of fashion over the last few years. After all, why have Manic Miner when you can have Tomb Raider II? However, if in these retro times where flares are back in fashion (for the tenth time in as many years) you still crave for the old days, then read on.

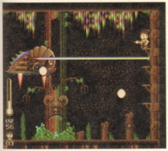
The story goes that you, our hero, have been sent on a quest by the King. Your goal is to find some mythical sword, hence the title. Armed only with your wits, and what can best be described as a machine gun, you must battle your way through various levels of fiendish traps and vicious monsters to achieve your goal.

Quite why the sword is so important to the King when he's got a machine gun in his arsenal I can't say. But the result is that you can dispense death in rapid bursts, so who am I to argue?

Bouncing around smoothly

The first thing to say about this game is that it looks nice. The graphics are neat and the baddies are varied and amusing. The backgrounds are well drawn and different on each level. The end of level baddies also look impressive. In fact it's hard to think of any game of its ilk which is better presented.

Your character bounces around smoothly, and the collision detection is good, so you rarely find yourself arguing with your monitor about the validity of your character's death.



▲ **Sword pits you against an almost unlimited supply of vaguely insectivoroid foe.**

As you progress, the levels offer some different challenges, as well as the usual array of dangerous leaps and troublesome nasties. I particularly like the underground levels, in which your path is lit by a little glowing sphere which rotates around our hero, illuminating only a small section of the screen – a nice touch.

On several levels you are challenged to stay ahead of the edge of the screen, which chases you relentlessly causing death on contact. In a similar vein you may also find yourself fighting your way out of a rapidly flooding cave system.

What about the gameplay?

Sadly, good presentation is not enough to make a good game. There are other features like playability to be considered. One of the hardest things to get right on any game is the difficulty level – too easy or too hard and you can quickly lose interest.

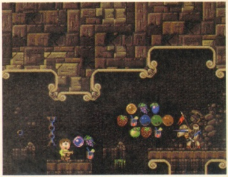
There is no question that some may find Sword just too difficult to bother with. It requires a lot of patience to get any distance with this game. Lives and indeed whole games can disappear rapidly. Learning from your mistakes is often the only way to get past certain hazards.

The patience needed to get you to the end of level baddies is nothing compared to the amount required to beat them. It is here that the game gets it all wrong. Apart from the baddies themselves, which suddenly make your character look very small and his gun seem very lame, the end of level screens are pretty dull. With so many hits being required to kill the damn beasts, and so few options as to how to go about it, you may find it difficult to maintain both your concentration and your interest.

No sneaky bits?

Another fundamental problem with this game is that it's just too linear. There is only one route through each level, and there are no short cuts or other sneaky extra bits to keep you searching. If you reach a part which you can't negotiate, you may find that giving up is a more tempting option than wasting your life away getting it right.

Fortunately you have plenty of lives, and any baddies you managed to kill with your previous life do not return to haunt you.



▲ **Make no mistake, that's a machine gun not a banjo. And you are going to need it if you want to get past that toy knight! Ahh, the heady surrealism of it all.**

After you lose your final life, you can continue your game from the start of that level, and there are level codes to prevent you from having to fight your way through the early levels every time you load the game. Having rooms or locations which can be visited in the order you chose, as in Super Mario World, would allow you to continue playing the game despite being stuck at a particular point. As for the music, an option to turn it off would be a bonus.

Overall, this is a well designed, challenging game. The animation is smooth, and there is enough variation between the levels to keep you wondering what the next one will be like, provided that you can be bothered to keep going.

Despite its many good features, Sword really doesn't have anything new to add to the platform game genre. However, if you have plenty of time on your hands and are craving a fix of platform action, this should have enough to keep you entertained. ■

Jonathan Brooker

SWORD

■ Workbench version	3+	Graphics	86%
■ Number of disks	1	Sound	60%
■ RAM	2Mb	Lastability	70%
■ Hard disk installable	Yes	Playability	80%

OVERALL

Nice try, but in the end Sword just doesn't quite cut it.

78%

Tips Central

Tips time again! This month we got some free labour from Dave Stroud who foolishly volunteered to type in this little lot, just for the honour of making Andrew Korn a cup of tea. Opposite it's Adventure Guru Sjur Matheson.

James Pond 2 – Robocod

Those colour-blind fish-loving platform-obsessed souls out there who still play James Pond 2 – Robocod may be interested to know the locations of some secret rooms.

Play the bath level, and immediately afterwards, drop to the bottom of the castle and walk left to the statues of the snowmen. These will turn into a moving platform when you jump on them, and you will be transported to the top of the screen. Now walk left into thin air, and jump.

You should be standing next to some doors now, behind which are plenty of bonuses. If you go back to the snowmen after completing the circus level, and jump on the snowmen again, a platform will float upwards and take you to a tunnel, where even more bonuses can be picked up.

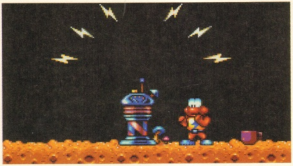
Championship Manager '93-'94

Following on from last month, here's another tip for Championship Manager '93-'94:

Select "New Game", "Tranmere" and "Arrogant" before calling yourself "Mr. Bulgaria" and then you will find yourself rolling around in lots of money. 30 million quid to be precise.

Transfer Summary
August '94
Exit

James Pond 3 - Operation Starfish



And for those James Pond fanatics who just couldn't get enough of the day-glo orange piscine secret agent and were suckered into also buying James Pond 3 - Operation Starfish, here are some cheats that should make your sub-aqua over-hyphenated life a hell of a lot easier:
On the map screen, type any of the following: "EVAS" to save your game at any time and "UNCLE ROGER" to get a message from the programmer. Alternatively, don't.

Super Stardust

Type in your password as any of the following so you can get some help:

HAPPYARCADE
Start with 7 lives.
YOUARESOSAD
Start on level 13.
MAKEMEHAPPY
Unlimited lives.
BZZZZZZZZZB
Warp 1, 25 lives + full powerups.
ENZZZTZALPO
Warp 4, special mission, 10 lives.
ZZZZZZZZZZZ
35 lives and full weapons.

Zool 2

If you're fed up of starting on level one all the time (and let's face it, who wants to do that all the time?), try typing these codes in on the title screen to be immediately transported to more exotic locations:

Level 2: SESAME
Level 3: RONSON
Level 4: FUNKYTUT
Level 5: HISSTERIA
Level 6: 7SLURP
Level,7: PLUNGER

Wendetta 2175

You say tomayto, I say tomarto, you say Wendetta, I say Vendetta. Wendetta, Vendetta, Wendetta, Vendetta, And now f'some level codes:

Level 1: CAQCTZP
Level 2: UADCVXW
Level 3: FAFWTJR
Level 4: YABTCJP
Level 5: KAJBFYU
Level 6: LALGVZS

You need help

If you would like some help on any game – or you have some tips that you'd like to share with your fellow readers – then please write to us at Tips Central at the following address, remembering to mark your envelope Adventure or Arcade accordingly:

Tips Central,
CU Amiga Magazine,
37-39 Millharbour, Isle of Dogs.
London E14 9TZ.

y of

rups.

ives.

lp on
ome
re
- then

mark
or

Dogs.

Adventure helpline

Monkey Island 2

Monkey Island 1.

I'm stuck on the ghost ship, as I don't know how to get the anti-root. Also how do I go through the squeaky door?

I've read a tip from CU Amiga adventure helpline, and it said you should use the grog on the rats to make some sort of grease for the door. But, if there are rats I can't find them. Please, help me?

Chris Watkins, S. Yorkshire

Dear Stuck, The first thing you have to get, is the key hanging on the wall in the captain's room. Try using something magnetic. Then you head for the room with the chickens, and open the hatch using the very key you just stole. Climb down and you're in for a creepy surprise.

Try serving them a drink. The rest is easy, so I guess I can gratulate you on completing The Secret of Monkey Island.

Simon the Sorcerer.

Please could you tell me how do I get in past the door outside of the Tower of Doom in Simon the Sorcerer 1?

Louis Shanahan, Ireland

Well Shanahanahan, I see the tip from the December-issue helped. Well... enough chit-chat. To enter the Tower of Doom, simply drink the potion you should have in your inventory. If you don't have it you need to visit the swamplings house, and go down the trapdoor.

Fix the loose plank with the nail, and you can reach the scull. On top of it there's a plant called Frogsbane. Collect some of it and give it to the druid in the city, in exchange for the potion.

Monkey Island 2.

Could you please give me some assistance with MI2. I'm stuck in the room with the lights out and cannot find the light switch.

If you can help me with this I'd be very grateful. Also I've noticed there's a MI3 out on some formats. Do you happen to know if there is an Amiga version planned?

Nicola Borrill, Rotherham

The assistant answers... The switch is there! You should be able to find it by moving your pointer around.

To narrow things down a bit, you should concentrate on the right side of the screen, and about half way up... or down. If we'll ever see Monkey Island 3 on our dear Amiga I don't know. There was a small rumour some months ago, saying a PPC version was under development, but I doubt it. We can still hope though, 'cause MI3 ended on top of the ClickBoom survey, asking what games people would like to see for their Amiga. Another solution would be to use shapeshifter and the Mac-version of the game, but you'd need a pretty fast amiga to do this.

Willy Beamish

Dear Helpline, Please help me, I'm desperate! I've been playing Willy Beamish for some time now, but I can't figure out how to get rid of the babysitter-bat on day 2.

Bart Simpson

Hello desperate. Head for the bathroom and pick up the hairspray. This can be used to slow the bat down. Next stop is Briannas room. The cat should be playing with a mouse. Take the mouse, and don't care about spoiling the evening for the cat. It can catch another one. Run down to the living room and spray the bat, before clicking on the vacuum cleaner.

You'll find yourself hiding behind the sofa. Place the mouse on the table, and you have bait. Use the target mark on the bat when it starts attacking the mouse, and you'll at least live to see day 3.

Operation Stealth.

Can anyone help me? I can't find anything to do in the office of the palace. Please help me!

Fred Flintstone

It's been quite a few years since I played this game. I didn't remember what to do myself, so I made a phone call to the owner of the palace and asked him.

He told me you could try operating the arm of the statue in the lower right corner of the room. A safe is then supposed to appear, but he wouldn't give me the code. He only said you'd need some kind of box, and mentioned he had lost one in the bank some time ago. If you had such a box, you'd have to operate the on/off button to the first switch on it.

Then you'd have to press the up/down arrows until the first light on the box lights up. Next step would have been to operate the validation button on the safe, then repeat the complete operation for the next tree lights, turn off and take the box, and then press the validation button again to open it. But that was only if you had such a box, he said laughing, before he hung up.

Lure of the Temptress

I've broken into Taidg's place and lit the apparatus, but I don't know how to make the potion or where to find the ingredients. Need your help badly.

Earthworm Jim

Help is near. All the answers are right in front of you. Read the diary and then examine the apparatus carefully. You'll find an oil burner, a flask, and a tap.

Use the tinderbox on the oil burner, and then the flask on the tap. Your problem should be solved, and you can start the quest for new ones.

MUD
THE FOUNDER
MUD SLOPPER
Simon the Sorcerer

Plenty to be getting on with in this month's Tech Scene, including the fascinating Distant Suns and a remarkably neat and ingenious A1200 tower solution, not to mention a round-up of mice and a couple of new Atari and Apple emulators.

TechScene

52 DISTANT SUNS 5.01 CD
Explore the farthest reaches of the known universe with the new CD release of the classic astronomy system.

55 APPLE II EMULATOR
You can emulate just about any personal computer on your Amiga. How about the Apple II?

58 ATARI 800 EMULATOR
Don't fancy the Apple II emulator? Maybe the similarly nostalgic Atari 800 is more your style.

59 POWER TOWER
With lights glowing like a Spielberg spaceship and a string of innovations on offer, is this the best tower ever?

61 INPUT DEVICES
We've tracked down a whole load of mice and a bunch of other input devices for an extensive buyers guide.

64 BLITZ BASIX CD
What do you get the Blitz Basic programmer who has everything? A CD with all of it neatly arranged in one place!

66 PD SCENE
More cheap and free Amiga entertainment from that curious place they call the PD Scene.

68 PD UTILITIES
More cheap and free Amiga utilities from the... no, that's not going to work is it?

72 ART GALLERY
Pictures and, frankly, more pictures from the curious lot they call the CU Amiga readership. Is yours in it this month?

Distant Suns 5.01 CD

■ Price: £29.99 ■ Supplier: Wierd Science ✆ 0116 2463800

Space... the final frontier. CU boldly goes where no Amiga CD-ROM has gone before.

Distant Suns is not a new program, but it is a great program. In fact, it's one of my favourite Amiga programs ever, and one which I've been using for years. It's for anyone who has ever looked up at the night sky and wondered, or in fact anyone with even a casual interest in astronomy and space sciences.

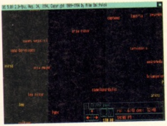
In a nutshell, Distant Suns is your own personal planetarium, but without the Laser Rock Shows at the weekends. For any given date, time and location it will display a picture of the sky, scattering the stars, planets and galaxies as you would see them on a clear night. With your room lights turned down, and monitor adjusted, the effect is beautiful.

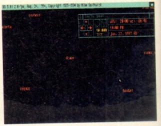
It's still very easy to use, and the manual does an excellent job of getting you over the potentially confusing hurdle of co-ordinate systems. Once you start it, it looks at your clock and calculates the position of all the objects you could potentially see. You'll need to tell if where you live (as your location on earth obviously makes a difference) but that's the hard part over. Distant Suns may lack the encyclopedia of background information which accompanied the similar Amiga package "The Digital Universe", but it makes up for it by being friendlier and less intimidating.

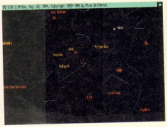
Since I last installed Distant Suns, I glad to report that it has sprouted an ARexx port. This is perfect for advanced users, because now your own programs and scripts can have access to the complicated mathematics involved in calculating the position of the sun, moon, stars and planets. With a little ingenuity, the ARexx port could be used in an Amiga based system capable of guiding a telescope for example. Some ARexx scripts are provided to get you started, and these include a function to return the position of the moon and a function which creates an animation of comet Halley's fly-past.

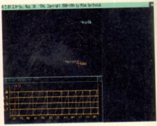
As it is now also distributed on CD-ROM, this means that the huge Hubble Guide Star Catalog and "Stars on Demand" files can be included: on their own these files would have consumed over four hundred floppy disks. These add-in files increase the number of stars which the program can display to the extent that most amateurs, even the keen ones with large telescopes, won't see the faintest. And that's a lot of stars - over sixteen million in fact.

Also on the CD-ROM are over 1500





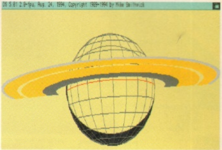




Heavenly Bodies

Distant Suns includes details on many more objects than the stars.

1. **Planetary Data** Now only can you find the position of the planets, but also view their phase - useful when planning telescope observations.
2. **Lunar observation** The moon is rendered with wonderful detail, including the correct shading. The stars around it are part of the Hubble Guide Star Catalog, which includes over 16 million stars.
3. **Planetary images** Click on a planet, and up pops a screen containing this kind of highly detailed image from the NASA archives. Award yourself 5 points if you recognised one of Mars' moons.
4. **Deep sky objects** Here we've selected one of the so-called Messier objects. Not only do we get detailed notes, but a little picture.


DS 5.01 2.0-fpu, Aug. 24, 1994, Copyright 1989-1994 by Mike Smithwick

▲ **Zoom in on planets, and check their phase.**

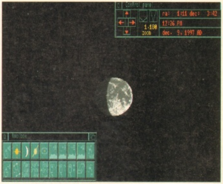
images of the planets and deep sky objects. These are linked into the program so that clicking on the little red dot that is Mars will bring up pictures of the surface, moons and so on. Some animations are also included to fill up the disk, and the result is an excellent package. It's better than a glossy book because it's interactive: you can see what the stars would look like on the day you were born, and you can create a map to take outside and use to guide yourself around the sky.

There's so much to Distant Suns that it's hard to do it justice in this relatively small review. You can print out your own star maps and ephemeris (a list of astronomical positions with setting and rising times), add your own objects such as comets, view the solar system from millions of miles away, watch solar and lunar eclipses, teach yourself the constellation names... it's a big, big program.

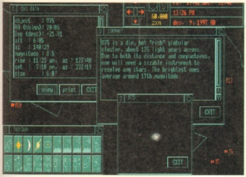
Not that big though: it was written back in a time when memory wasn't cheap, and so it will work on almost any system. Obviously an accelerator card will make a difference to speed (an FPU version is included), as there are a lot of sums involved, but even on an A1200 it's fast enough to be useful.

Perhaps the only problem is the lack of support for graphics cards. Although the Distant Suns screen mode can be promoted using utilities such as NewMode, a built-in mode requester would be better than the limited tooltype support. There are rumours of this appearing in an update, so pester the publishers and let them know. ■

John Kennedy



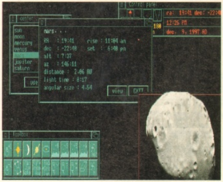
◀ **The moon graphic is so good it looks like a photograph!**



object : M75
RA (hh:mm): 20:05
Dec (degs): -21.91
alt : 6:05
az : 140:29
magnitude : 8.5
rise : 11:23 am, az : 127:40
set : 7:10 pm, az : 232:19
size : 6.0'

M75 is a dim, but "rich" globular cluster, about 125 light years across. Due to both its distance and compactness, one will need a sizable instrument to resolve any stars. The brightest ones average around 17th magnitude.

◀ **Click on the galaxy and up pops a tiny photograph so you know what it looks like.**



mars. . .
RA : 19:41 rise : 11:04 am
dec : -22:40 set : 6:40 pm
alt : 7:37
az : 146:11
distance : 2.06 AU
light time : 0:17
angular size : 4.54

◀ **Speaking of photographs, the CD-ROM is packed with NASA images.**

Different views

There are many different ways to look at the sky with Distant Suns, depending on what you hope to see.
You can configure it to show you what you would see if you went outside (complete with twinkle effects) , or you can view the entire solar system from an imaginary spacecraft.

1. **Planetarium view** This view displays a huge 180 degree view. It's useful for quickly finding a particular object.
2. **Local view** Switch to local view to create the picture you would see on a perfect night. You can even change the landscape to match your surroundings.
3. **Local with extra data** Extra information such as star names and grids to help you find your way about can be toggled on and off.
4. **View from space** Here's the inner solar system planets as seen from four times the distance of the sun. You can watch as the planets rotate, and even create an animation of it for later.

DISTANT SUNS 5.01 CD-ROM

System Requirements:
2Mb RAM, 4Mb hard drive space, Workbench 2.04

Ease of use..88%
Some knowledge of astronomy would be useful, but is in no way essential.

Performance..90%
Surprisingly quick when you realise the mathematics involved.

Value for money..95%
A bargain for such a professional, useful and educational program.

OVERALL
Great to see this wonderful program on release again.
92%

AMIGA 1200
AMIGA MAGIC
170 MB

AMIGA INTERNATIONAL, INC.

At Last, the Amiga is BACK ON SALE with NEW machines from Amiga International Inc. All machines are full UK Specification and come bundled with WordWorth v4SE (Word Processor), TurboCalc v3.5 (Speadsheet), DataStore v1.1 (Database), PhotoGenics v1.2SE & Personal Paint v6.4, Organiser v1.1, Pinball Mania, Whizz and now ..... Directory Opus 4.12!

All Hard Disk models also include the above software & Scala MM300 pre-loaded, the Official Amiga Hard Disk manual & HD Install disk.

AMIGA 1200 MAGIC PACKS

68020/14.3MHZ
2MB RAM
No HD
£249.9

68020/14.3MHZ
6MB RAM
170MB HD
Scala MM300
£349.99

68030/40MHZ
10MB RAM
170MB HD
Scala MM300
£419

68040/25MHZ
18MB RAM
1.3GB HD
Scala MM300
250w PSU
£599.99

68040/40MHZ
34MB RAM
1.3GB HD
Scala MM300
250w PSU
£699

FREE UK DELIVERY

MONITOR OPTIONS

Low Cost 14" Monitor
15Khz Only
TV Display
Remote Control
Amiga Cable Supplied
£159.99

Professional 14" Monitor
MultiSync 15 - 31.5Khz
Flicker Free Display
Amiga Cable Supplied
£249.99

HARD DISKS

FREE UK DELIVERY

Complete Expansion Kit Solution for the Amiga A1200

FREE OPUS 4.12 worth £50

3 YEAR WARRANTY

Yes, at long last, a professional way to install a high capacity hard disk WITHOUT removing parts from your machine or bending your keyboard around the drive. Our packs come with EVERYTHING you need to install the drive into an A1200, Cables for power and data, Instructions & 7 disks FULL of HOT software such as Directory Opus 4.12 (worth £50), MUI 3, MCP, Galaga AGA, Virus Checker, Mods, ReOrg, ABackup and MUCH MORE. All software can be installed with our custom click 'n' go system. All drives are pre-installed with the system software & above disks - unlike others we provide the disks just in case!

1.3GB £159.99
2.5GB £219.99

Want us to fit your Hard Disk for you? CALL FOR MORE DETAILS.

REPAIRS

by Qualified Technicians

- All Amiga Computers Covered
- Prices from as little as £29.99
- Many repairs by Wizard require NO Parts
- Prices include *Insured Courier Collection & Delivery*, Labour, Full Diagnostics, Service, Soak Test & VAT.
- Fast Turnaround
- All Technicians are Fully Trained & Qualified
- Upgrades bought at same time fitted FREE!
- 90 days Warranty on all Repairs

PRICES INCLUDE COLLECTION & DELIVERY

All for just **£29.99** + parts

PARTS

We have a large range of parts for ALL Amiga's - Drives, Keyboards, Mouse Ports, Chips and more. Please call for pricing details.

MAGNUM

A1200 Expansion Cards

FREE OPUS 4.12 worth £50

Speed Increase of up to 27 times ◆ 68030/EC, 68040 or 68060 Proc
running at 33, 40 or 50MHz ◆ MMU in ALL processors (except 68030EC ty
◆ '040 fits Standard A1200 - no problem & is supplied with a Heatsink & Fan ◆ Up
32mb of RAM can be added ◆ Kickstart ReMapping (except 68030EC version) ◆ Optional SC
interface ◆ Can accommodate a 72-pin SIMM ◆ 68040/60 have built-in FPU ◆ Battery Backed Clock/Calender ◆ PCMC
compatible so you can still use products such as OverDrive HD or CD/Zappo CD-ROM or Squirrel ◆ Zero Waite State De

SCSI-II Interface for the Magnum 68030/68030EC/68040 & 68060 Cards - Supplied with Software - **£79.99**

	0MB	4MB	8MB	16MB	32MB
'030/33 & FPU	£89.99	£109.99	£129.99	£159.99	£209
'030/40 (68030EC Chip)	£89.99	£109.99	£129.99	£159.99	£209
'030/40 & FPU (68030EC Chip)	£99.99	£119.99	£139.99	£169.99	£219
'030/50	£119.99	£139.99	£159.99	£189.99	£239
'040/25 & FPU	£179.99	£199.99	£219.99	£249.99	£299
'040/40 & FPU	£229.99	£249.99	£269.99	£299.99	£349
'060/50 & FPU	£349.99	£369.99	£389.99	£419.99	£469

FREE OPUS 4.12 worth £50

Speed Increase of 2.3 times - 2.88mips ◆ Available with
or 8mb of 32-bit RAM installed ◆ Uses a Standard 72-
Simm ◆ Optional PLCC Type FPU (floating point unit)
◆ Battery Backed Clock/Calender ◆ Finger CutOut to he
Installation ◆ Trapdoor Fitting - doesn't void warranty ◆ 0-4
pcmcia compatible (for use with overdrive,
squirrel etc.) ◆ Zero Waite State Design.

	0MB	4MB	8MB
RAM8	£39.99	£59.99	£79.99
RAM8 & 33MHz FPU	£54.99	£74.99	£94.99

FREE UK DELIVERY

FROM £39.9

LOWEST EVE PRICES!

560DPI 3 BUTTON MICE & MATS

for all Amigas & Atari STs

Award winning 560dpi Resolution ◆ 90% rating in CU Amiga ◆ Micro Switched Buttons ◆ Amiga/Atari ST Switchable ◆ All 3 buttons can be used with many programs such as Directory Opus 5

FREE THIRD BUTTON DRIVER DISK

BEIGE or BLACK £12.99
MAT £2.99 or **£1** with a mouse

PowerBox

250w Amiga Power Supply

Power-Up your Amiga with this 250w Enhanced Amiga PSU for little more than the price of a normal 25-30w Amiga PSU! Designed for A500/600 & 1200 (CD32 also available). Encased in Steel Subsystem, All Cables Supplied, Whisper Quiet Fan, Illuminated On/Off switch, Monitor outlet on back of PSU, Only Quality/New PSU's used, 3.5" & 5.25" power cables available to power external CD-ROMs Hard Disks etc.

£49.99

GOLD

POWERSTRIP

Power 4 normal plugged devices (monitor, printer, speakers etc) direct from the back of PowerBox. Turn ALL products on/off with just ONE switch.

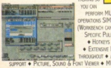
£19.99

DIRECTORY OPUS 5

THE ULTIMATE WORKBENCH REPLACEMENT & FILE MANAGEMENT SYSTEM

GOLD

VERSION 5.6 NOW SHIPPING



Combines the Easy to use Workbench Environment and the POWER of Opus in one ◆ Replace and Enhance Workbench ◆ OpusFTP to open an FTP site as a File Lister ◆ Internal Multi-Tasking so you can perform MULTIPLE file operations SIMULTANEOUSLY (Workbench can't!) ◆ File-Type Specific Pulldown Menus ◆ Hotkeys ◆ Scripting ◆ Extensive Drag 'n' Drop throughout ◆ Advanced ARexx support ◆ Picture, Sound & Font Viewer ◆ MUI & NewIcons Support ◆ Sort file Lists & display Versions and FileTypes ◆ CyberGraphic Supported

Workbench 2+ & Hard Disk Required

£49.99

TURBOPRINT 5

Printer Enhancement Software

CALL ABOUT UPGRADES

If you have a printer - you MUST get TurboPrint. It radically enhances the printouts you normally get by replacing the Amiga Printer System with the Faster and Visibly Better TurboPrint System. Options include Poster Printing, Colour Correction, Dithering, Colour Balancing, On-Screen Preview and Much More... Most printers are supported - call to check. Version 5 includes "Graphic Publisher" to load multiple pictures, individual colour correction, rotate, twist and more. Enhanced TrueMatch colour correction, New drivers for HP, Canon, Epson Stylus and Citizen models. Amiga Format Gold. CU Awards.

£49.99

SATURN

External 1Mb Floppy Drive for all Amigas

Compatible with ALL Amigas ◆ High Quality SONY Drive ◆ Robust Metal Case ◆ Anti-Click as Standard ◆ Enable/Disable Switch ◆ Low Power Consumption ◆ Thru Port for Extra Drives

£39.99

FREE OPUS 4.12

With PowerCopy Hardware/Software Backup System & 3 Games

£49.99

PC TASK 4

Advanced 486 PC Software Emulator

CALL ABOUT UPGRADES

VERSION 4.2 NOW SHIPPING

Featuring Advanced 486 software Emulation, Dynamic Compilation for faster emulation, up to 16mb accessible under MS-DOS, MDA, CGA, EGA, VGA & SVGA supported, up to 256 colours on an AGA machine, CyberGraphic support, Multiple hard disk files or partitions Supported, CD-ROM and High Density drives supported, Run MS-DOS applications in a window on Workbench! Run Windows 3.1 in Enhanced Mode! Many times quicker than version 3.1.

Requires Kickstart 2.0 or above & a 68020 Processor or Better.

£69.99

EASYLEDGERS 2 - The ONLY full accounts package, Amiga Format Gold - Call about Trail Offer - Hard Disk & 2mb RAM Required - **£119.99**

GP FAX - Send Faxes to and from your Amiga. Even Fax directly from your application. Amiga Format Gold - Amiga Computing 9/10 - Fax Compatible Modem Required - **£44.99**

IMAGEFX 2.6 - The most complete Image Processing Package there is for the Amiga. Amiga Format Gold - CU Award - 2mb & Hard Disk Required - **£179.99**

33MHZ FPU KIT

PLCC Type FPU & Crystal - will fit most cards - call to confirm - **£29.99**

A500 512k RAM Expansion	£14.99
A500plus 1mb RAM Expansion	£19.99
A600 1mb RAM Expansion	£19.99

All with a FREE Opus 4 worth over £50

50 2S/DD Disks & Colour Labels	£14.99
100 2S/DD Disks & Colour Labels	£24.99

4mb 72-pin SIMM	£20
8mb 72-pin SIMM	£40
16mb 72-pin SIMM	£70
32mb 72-pin SIMM	£120

All SIMMs are NEW and have a 1year Warranty

BSB

Books & Videos

Insider Guide - A1200	£14
Insider Guide - A1200 Next Steps	£14
Insider Guide - Assembler	£14
Insider Guide - Disks & Drives	£14
Insider Guide - Workbench 3 A to Z	£14
Total! Amiga - Workbench 3	£15
Total! Amiga - AmigaDOS	£21
Total! Amiga - ARexx NEW	£21
Total! Amiga - Assembler	£24
Mastering Amiga Scripts	£15
Mastering Amiga Beginners	£15
Mastering Amiga Printers	£15
Mastering AmigaDOS 3 - Reference	£21
Mastering Programming Secrets	£21

AmigaDOS Pack £34
Total! Amiga - AmigaDOS & Mastering AmigaDO
- Reference Usually £43.94 - SAVE NEARLY

A1200 Beginner Pack £39
2 books (Insider A1200 & Next Steps), a 60 Minute
4 disks of PD to go with the books/videos

A1200 Workbench 3 Booster Pack £39
2 books (Disks & Drives & Workbench 3 A to Z), a 90
minute Video, 1 disk & Reference Card

**** BUY 2 OR MORE BSB PRODUCTS**
**** AND GET 10% OFF! ****

ORDER HOTLINE
0181-303-1800
FAX 0181-303-1861

WE ARE OPEN 9AM AND 5.30PM, MONDAY TO SATURDAY, TO PAY BY CREDIT CARD. TO PAY BY CHEQUE OR POSTAL ORDER PLEASE SEND YOUR ORDER TO - WIZARD DEVELOPMENTS, PO BOX 490, DARTFORD, KENT, DA1 2UH

VISA MasterCard SWITCH

CONTACT US ON INTERNET
sales@wizard-d.demon.co.uk

FREE UK DELIVERY

WIZARD DEVELOPMENTS

Cheques should be payable to WIZARD DEVELOPMENTS. Prices include VAT & carriage to the UK mainland. Please add £5 for EC destinations and £10 for other countries. All products are subject to availability. E&OE. Advertised prices & specification may change without notice. All sales are subject to our trading conditions - copy available on request.

Apple II Emulator

Freeware. Distributor: Microcode Solutions

http://www.ctaz.com/~msdei

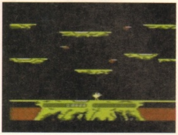
The Apple II, for better or for worse, was the garage-designed computer that Steve Jobs convinced millions of people and countless institutions to buy. It was a bit of a paradox by 1982, it was offering less in features for more money than other computers, but had such name recognition and software support it kept plugging along. And with A-II, you can keep a 48K Apple II+ plugging along on your Amiga.

At first, I was skeptical of A-II. After all, we already had a very capable, if not perfect Apple II emulator in Apple2000. While it hasn't been updated for three years, it does a pretty good job. Add on top of that the fact that A-II comes from Microcode Solutions, the principles of which had once solicited Apple2000's author to buy the program, and even showed it at a convention, and you worry a little more.

To clear that up first, A-II is not Apple2000. Its operation does share some common features, such as variable speed and multiple input selection on the fly, but as far as I can tell this is not a simple rehash of someone else's work.

The emulation takes place on a custom screen (AGA not required). You will need to obtain the original ROM images for the emulation to work properly. Other than that, even a standard A1200 can run the emulator, although with an 030, you will be able to get the full experience, more or less, of using a real Apple II+, right down to the limited but garish palette and the sound that makes PC speakers sound symphonic. A-II allows the reading of disk images and memory snapshots, and there are certainly a lot of them out there.

I did have a difficult time spotting the differences between A-II and the incumbent Apple2000, and at first all of the points went to Apple2000's column. A-II has the annoying habit of opening its file requesters on the Workbench instead of on the same screen as the emulation. Rather than holding the disk image in memory and only saving changes when told to, A-II allows the emulation to write to your disk images at will. And I prefer Apple2000's "status bar" to the teeny on-screen icons A-II uses for user information. But then the compatibility tests started.



▲ **Unless my eyes deceive me, here's that old fave Joust doing the emulator thang.**

I dug out programs that had given me trouble on Apple2000, usually with crashes due to an unknown instruction, and A-II capably handled some of them. It also has a write-protect option for disk images which some games require. It also renders the Apple's graphics slightly diferently, avoiding some of the historically accurate but annoying Apple II+ color bleeds and splotches.

Had A-II implemented a 128K Apple, it would have been wonderful, but as it stands A-II will have to be a complement to, rather than a replacement of, Apple2000. ■

Jason Compton

APPLE II EMULATOR
Developer: Microcode Solutions

System Requirements: OS 2.04, 68020, 1 Megabyte memory. 2 Megs memory and hard drive recommended.

OVERALL

It should have pushed the envelope a bit more.

80%

Atari 800 Emulator

Freeware. Distributor: Microcode Solutions (www.ctaz.com/~msdei)

While it's generally accepted that the Apple II started the home computer revolution, it was the Atari 800 that was the first home computer that had the sort of qualities we came to expect: good graphics/sound and at least a semblance of user-friendliness.

The Atari 400 and 800 predated Sinclair and Commodore's forays into home computing by a couple of years and their popularity peaked earlier, and with less overall success. By 1985 it was clear to most software developers that their fortunes lay elsewhere. But the Atari 8-bit computers share a special common thread with Amigas – they were largely designed by custom chipset wizard Jay Miner.

Finally, Microcode Solutions has provided an easy-to-use program to emulate these old workhorses. ACE has been released as freeware in an as-is state. That means emulation isn't perfect, some features are unimplemented, and isn't likely to get any better.

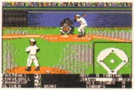
But there aren't many alternatives, and ACE is the only one that will run well on an 030 Amiga.

ACE emulates the original 48k Atari 800, meaning most but not all of the software you can find for the Atari may work. (Later models boasted up to 256k of memory, but those were in the dwindling years of its life.) ACE even boasts an Amiga-to-Atari networking system you are invited to build at your own risk, which will allow you to access real Atari hardware.

As it stands, ACE will run cartridge images, disk images, and "snapshot" files. The XFD disk format is supported over the more popular ATR, but stripping the top 16 bytes from an ATR file turns it into an XFD. AGA is recommended for full color and sprite effects (the Atari had some very splashy "colorbar" effects thanks to its Jay Miner chips, and pioneered the hardware sprite). Graphics cards are not supported by the emulation.

As with any emulator, compatibility problems arise. ACE has trouble with a few Atari graphics modes leading to very corrupted graphics. It sometimes "loses" sprites or doubles their dimensions when inappropriate. And then there are programs which will simply fail. For the industrious hacker, ACE has an exceptionally elaborate debugger built in, so you can pick apart problems or learn more about the Atari's inner workings.

ACE is blemished, but I am grateful for the release of a straightforward emulator for the Amiga, and can only hope it will inspire others to build on the work and come up with a more rock-solid way to experience the very unique and underappreciated world of Atari 8-bit computing. And if you're interested in buying the technology outright, I hear JTS Corp, which recently bought out Atari, isn't doing much with it these days. ■



▲ **Atari Baseball. Americans play this game, apparently.**

Jason Compton

ATARI 800 EMULATOR
Developer: Microcode Solutions

System Requirements: OS 2.04, 68020, 1 Megabyte memory. 2 Megs memory and hard drive recommended.

OVERALL

Certainly better than we've had to date.

80%

Harwoods... always the Fastest Amiga Boards and NOW PowerPC Technology for Amigas too!

NEW...

POWERUP

AMIGA™ GOES POWERPC™

POWER UP YOUR AMIGA...

*A further dimension is being added to Amigas with our new PowerPC based **BLIZZARD POWER BOARDS** for A1200, A1200 based Tower Systems and A1500/2000 systems along with the new **CYBERSTORM PPC** for A3000/4000 systems. You'll now be able to benefit from performance many times beyond the speed of the fastest 680x0 based boards.*

Designed as upgrades for existing systems, **Power Boards** incorporate innovative dual processor technology where a fast PowerPC RISC processor is combined with a 68k CPU, dynamically sharing memory and system busses.

While the original AmigaOS 3.x continues to run on the 68K CPU, supporting existing applications to provide backward compatibility, the PowerPC CPU is backed by comprehensive PPC Libraries which provide the functionality to integrate PowerPC into an Amiga multitasking environment.

Software developers can easily optimise their programs, step by step, porting single tasks to PowerPC code, which then run in parallel with 68k tasks. Leading Amiga software vendors are preparing ported or optimised versions of their software packages already. It is anticipated that a large quantity of software products supporting the PowerPC will be available soon.

Power Boards will be delivered with a comprehensive suite of utilities, including the PPC library, as well as tools for creative users. Among them is a Public Domain GNU C compiler for PowerPC (including sourcecode), many demo programs and utilities with sourcecode. In addition to this software, free developer support is available via FTP site.

Last but not least, a PowerPC optimised version of CyberGraphX V3 with RISC optimised CyberGL/3D plus MPEG functions and libraries is included (along with a special GGX driver to support the AGA chipset) with full and comprehensive documentation.

	Blizzard 603e PowerBoard	Blizzard 603e+ PowerBoard	Blizzard 2604 PowerBoard	Cyberstorm PPC
PowerPC CPU Clock Speed	603e 160-250MHz	603e 160-250MHz	604e 150-200MHz	604e 150-200MHz
Companion CPU	68030 50MHz	68040/68060 25-50MHz	68040/68060 25-50MHz	68040/68060 25-50MHz
Est. PPC Performance MIPS SpecFP95	@ 250MHz Approx. 280* Approx. 3.5	@ 250MHz Approx. 280* Approx. 3.5	@ 200MHz Approx. 350* Approx. 7.1	@ 200MHz Approx. 350* Approx. 7.1
Memory Option SIMM Sockets	Max. 128Mb 2	Max. 128Mb 2	Max. 128Mb 4	Max. 128Mb 4
SCSI On Board	Fast SCSI-II	Fast SCSI-II	Ultra Wide	Ultra Wide
Amiga Compatibility	A1200(T)	A1200(T)	A1500/2000	A3000/4000(T)
Est. Availability	DEC '97	DEC '97	Summer '97	Summer '97

Blizzard 603e Power Board - A1200(T)

The new Blizzard 603e Power Board is an inexpensive Power Up Accelerator for A1200 system owners who already have a board with a socketed full 50MHz 68030+MMU processor (these CPUs have a gold finish to the top surface) eg.50MHz Blizzard 1230-II, III, IV or similar. Featuring a 160-250MHz PowerPC 603e RISC CPU, the board has a socket for the 50MHz 68030, expansion capabilities of up to 128Mb high speed memory and built in SCSI-II controller.

Imagine the performance from your A1200 with this low cost board!

Blizzard 603e+ Power Board - A1200(T)

The Blizzard 603e+ Power Board is the highest spec Power Up Accelerator for A1200 systems. Featuring a 250MHz PowerPC 603e RISC CPU, the board has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 128Mb of high speed memory and built in SCSI-II controller. This board is ideally suited to those owners who already use an accelerator with either a 68040 or 68060 CPU (ie. Blizzard 1240T/ERC or Blizzard 1260 owners or their equivalents)

If you want the BEST from YOUR Amiga A1200 - this is it!

Blizzard 2604 Power Board - A1500/2000

If you own either an A1500 or A2000 you can now take advantage of PowerPC technology with this 604e CPU RISC based board which has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 128Mb of high speed 64-Bit memory, built in Ultra-Wide SCSI controller and a high performance expansion slot for expansions such as the CyberVision PPC. This board is ideal for owners of accelerators with 68040 or 68060 processors such as the Blizzard 2040 or Blizzard 2060 owners (or their equivalents).

Want the BEST from YOUR Amiga A1500/2000? - Look no further!

CyberStorm PPC Board - A3000/4000(T)

CyberStorm PPC is the ultimate accelerator for Amiga 3000[T], 4000[T] and systems with compatible CPU slots, offer blistering 604e performance - more than 10 times faster than any 68k based accelerator on sale today! Available with clock speeds of 150, 180 and 200MHz, the companion socket for the 68k processor accepts either a 68040 or 68060 CPU. The board provides 64-bit wide extremely fast memory expansion using pairs of standard SIMMs, dynamically shared by the two CPUs. Additionally, CyberStorm PPC comes with a DMA driven Wide ULTRA SCSI controller on board offering transfer rates of up to 40Mb/sec for even the most demanding of professional applications. A 32Bit high speed expansion connector, with DMA access to the main memory, is also provided for later upgradeability.

The 200MHz version of the CyberStorm PPC provides performance of more than 350 MIPS or approximately 8.1 SPECint95 and 7.1 SPECfp95*... breathtaking speed that goes far beyond that offered by most PC systems. In the second half of the year, an advanced graphics board will become available for the CyberStorm PPC expansion slot, providing a subset of the innovative CAIPIRINHA custom chip. By having a stand alone version of the DLRP (Display List Risc Processor), this board will offer superior display capabilities through higher VRAM-based resolutions, pixel depths and speeds, as well as the potential to begin developing software supporting the functionality of the forthcoming A\BOX system.

PRICING AND AVAILABILITY:

Options with or without 68k CPUs will allow users to fit the CPU from their existing accelerator. Delivery of Power Boards is scheduled for Summer 1997 following finalisation of CE approvals. Call now for full details.

Special prices available to existing BLIZZARD & CYBERSTORM board users

Blizzard 603e/603e+ Board...	160MHz	200MHz	250MHz
with Empty 030/040/060 Socket	£269.95	£359.95	£429.95
with 68030/50MHz fitted	£302.95	£392.95	£462.95
with 68040/25MHz fitted	£305.95	£395.95	£465.95
with 68040/40MHz fitted	£331.95	£421.95	£491.95
with 68060/50MHz fitted	£466.95	£556.95	£626.95

Cyberstorm PPC 604e Board...	150MHz	180MHz	200MHz
with No Processor	£479.95	£549.95	£629.95
with 68040/25MHz fitted	£519.95	£579.95	£669.95
with 68040/40MHz fitted	£549.95	£609.95	£699.95
with 68060/50MHz fitted	£709.95	£769.95	£859.95

**Quoted performance figures are estimations based on specifications from Motorola/IBM and are relevant to the PowerPC processor only. Prices include VAT @ 17.5%. Owners of other makes of board or those who don't already have an appropriate CPU - please call for prices.*

POWER PC TECHNOLOGY, POWER PC SPEED and POWER PC PERFORMANCE

STILL THE FASTEST, NOW LOWER PRICED, NO ONE ELSE EVEN COMES CLOSE!

BRAND NEW...

Estimated Availability FEB '98

CYBERVISION PPC

HIGH END GRAPHICS CARD for...
PowerUP, CyberStorm PPC and Blizzard 2604 PowerBoards

The CyberVision PPC is a high performance graphic card which can be installed on the expansion slot of the PowerPC 604e based PowerUP Accelerators, the CyberStorm PPC and the Blizzard 2604 Power Board. The use of CyberVision PPC is highly recommended for use with the Blizzard 2604 Power Board to speed access to the ECS Chip Memory or Zorro II based graphics boards found in A1500/2000 Amigas.

Performance of CyberVision PPC benefits from the high data bandwidth achieved by direct connection to the processor bus utilising the graphics direct connector which incredibly speeds up, for example, 3D rendering/display. Breathtaking performance is enhanced not just by the ultra fast processor access into the video memory, but also the internal speed and functionality of the CyberVision PPC.

CyberVision PPC is equipped with the powerful PERMEDIA2 Graphics Controller providing outstanding 3D performance of up to 80 million textured 3D pixels/sec, with hardware accelerated rendering functions such as z-buffering, gouraud shading, fogging, blending and anti-aliasing. As the design of PERMEDIA2 hardware suits OpenGL implementation, its 3D performance can support CyberGL functionality of CyberGraphX V3 Native which is supplied with PowerUp boards. In combination with the high floating point performance of the PowerPC 604e processor, a breathtaking performance in professional 3D applications can be achieved. Additionally, the PERMEDIA2 processor supports functions such as colour space conversion, chroma keying and XY-Scaling which is used by the software MPEG decoding routines of CyberGraphX V3 Native.

- 64Bit Wide SGRAM with data throughput of up to 800Mb/sec - allows ultra fast RAMDAC to display up to...
  1280 x 1024 in true colour at 85Hz screen refresh rate and...
  1600 x 1200 in true colour at 60Hz or high colour at 85Hz.
- 4Mb or 8Mb Display Memory options

CyberVision PPC... 4Mb Display Version	**£CALL FOR LATEST NEWS**
CyberVision PPC... 8Mb Display Version	**£CALL FOR LATEST NEWS**

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.

1260 TURBO ACCELERATOR MEMORY BOARD

A1200 TURBO ACCELERATOR and MMU/FPU
50MHz 68060 - 0Mb Standard, expandable to 64/192Mb
38.71MIPS with single sided 60/70 Nanosecond SIMM fitted.

Offers Amiga A1200 owners FULL 68060 POWER with a board that simply plugs into the trapdoor slot. Your A1200 will then operate at TWICE or even THREE TIMES THE SPEED of an '040 based upgrade and up to FIVE TIMES THE SPEED of a standard A4000! Available options such as the SCSI-IV Kit and RAM are shared with the Blizzard 1230-IV and 1260.

Blizzard 1260 Turbo 50MHz 68060 and MMU/FPU, 0Mb 32Bit Fast RAM, exp. to 64/192Mb **£319.95**

LOWER PRICE!

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.

1230-IV TURBO ACCELERATOR MEMORY BOARD

A1200 TURBO ACCELERATOR and MMU
50MHz 68030 - 0Mb Standard, expandable to 128/256Mb
9.91MIPS with 60 Nanosecond SIMM fitted.

The highest performing 68030 Accelerator available for your A1200. With its 50MHz 68030 and MMU, the 1230-IV offers BETTER PERFORMANCE at a LOWER PRICE. With a SysInfo rating of 9.91 (using a 60 n/s SIMM) you can see the 1230-IV is very fast... a performance gain of up to 500% is achieved! Via its Fast Expansion Bus, an optional SCSI-2 Controller module can easily be fitted. An industry standard SIMM socket provides for up to 128Mb of auto-configuring 32Bit Fast RAM (up to 256Mb with the SCSI-2 option using its extra SIMM socket).

Blizzard 1230-IV Turbo 50MHz 68030 and MMU, 0Mb 32Bit Fast RAM, exp. to 128/256Mb	£89.95
Fast 60 Nanosecond SIMM RAM Expansions - 32Bit, 72Pin	£Call
Motorola Maths Co-Processor - 68882 PGA type FPU, 50MHz	£39.95

LOWER PRICES!

BLIZZARD SCSI-IV KIT

SCSI-2 MODULE for 1230-IV, 1240T/ERC & 1260, & ADDITIONAL 128Mb SIMM SOCKET
(Fast SCSI-2 DMA Controller - upto 10Mb/s transfer rates with additional SIMM socket/extra RAM)

Blizzard SCSI-IV Kit £59.95

1230-IV and 1260 FEATURES

- May be disabled with simple keystroke on boot up - for full games compatibility, even badly programmed/older software
- Battery backed self re-charge Real Time Clock
- High performance expansion with full 32Bit wide DMA
- Easy trapdoor installation - no modifications required
- 1230-IV features PGA FPU socket allowing optional 50MHz 68882 FPU

CYBERVISION 64/3D

64-Bit ENGINE A2000/3000/4000 (T Series) 3D VERSION 24-Bit COLOUR ACCELERATED GRAPHICS CARD.

LOWER PRICES!

For all Zorro-3 and Tower System A1200s with Zorro II backplanes. The core of this great board is the VIRGE GRAPHICS CHIP from S3. With 3D capabilities, it's able to process complex 3D functions in hardware (eg. shaded & textured surfaces) with Trilinear Filtering and Shading/Fogging for super realistic Real Time 3D Rendering. When used with CyberGraphX 3D library, Cybervision 64/3D can even offer a broad range of 3D facilities for any software developer.

CyberVISION 64/3D... 4Mb Version **£139.95**

MPEG Decoder - added to the Feature Connector to provide real time MPEG audio and video decoding at full size custom screens or, in Workbench windows (HQ display using 16/24Bit modes from CyberGraphX Workbench). Stereo audio output is provided via the supplied dedicated line output jack. Upgrade to a Cybervision 64/3D and MPEG bundle (from previous Cybervision 64) for a special low price! **£149.95**

Monitor Switcher - with integrated scan line doubler. Designed to fit into the Amiga slot, this gives full automatic switchover from the standard Amiga signal to Cybervision 64/3D's output. Both cards may be fitted inside A3000/4000 models leaving three Zorro-III slots free. **£69.95**

CYBERSTORM II

AMIGA 68060 ACCELERATOR

LOWER PRICES!

Cyberstorm II is an ultra powerful graphics accelerator. When you fit a Cyberstorm II 68060 Accelerator to YOUR A3000, A3000T, A4000 or A4000T you can for example, render a graphic with Imagine 2.0 software in just 2.4 minutes! Compare that with 10.34 minutes on a standard A4000 '040/25!

With no jumpers, both Cyberstorm II models are fully plug and play and, A4000 users even have the option of a SCSI-2 Module if they wish (A3000s already have SCSI built in).

- Up to 128Mb of standard SIMMs can be installed and you can even transfer the 72Pin SIMMs from your Amiga A4000 straight onto your new Cyberstorm.
- Optional SCSI-2 Module
- If your budget currently only covers the cost of Cyberstorm II 68040ERC, you can always upgrade later to the full 68060 processor for the extra power!

Cyberstorm II 68060/50 50MHz 68060 - 0Mb, Expandable to 128Mb LAST FEW AVAILABLE...	£389.95
Cyberstorm II SCSI-2 Module	£69.95
Cyberstorm II SIMM RAM Expansions (Please call for a range of SIMM prices)	£Call

CYBERSTORM III

AMIGA 68060 ACCELERATOR

BRAND NEW...

NEW Cyberstorm III is the latest high end 68060 Accelerator Board for YOUR A3000, A3000T, A4000 or A4000T (or system with compatible slot). Features a high performance 68060 processor at 50MHz clock speed, a memory expansion option for up to 128Mb of ultra fast 64Bit memory, a Wide-Ultra-SCSI controller on board and an expansion slot for high performance expansions such as the CyberVision PPC.

- Up to 68Mb/sec sustained memory transfer rate - ideal for applications demanding the use of large amounts of data. Memory design of the Cyberstorm III is 50% faster than the Cyberstorm II resulting in real world application performance increases of up to 25%!
- Wide-Ultra-SCSI Controller onboard
- Expansion up to 128Mb of ultra fast 64Bit memory
- Expansion slot for high performance expansions - eg. CyberVision PPC etc,

Cyberstorm III 68060/50 50MHz 68060 - 0Mb, Expandable to 128Mb	£469.95
Cyberstorm III RAM Expansions (Please call for a range of RAM prices)	£Call

MOTOROLA MOTIVATED

Blizzard and Cyberstorm products use MOTOROLA 68030 and PowerPC series processors. They run **WITHIN** the electrical timing specification laid down by Motorola to prevent any possible overheating/reliability problems. So, when you pay for a 50MHz CPU for example, that's exactly what you get... not a 40, 33 or even a 25MHz CPU "clocked" to 50MHz! Look out for the **MOTOROLA MOTIVATED** logo - your guarantee of our commitment to quality and reliability - **BEWARE** of "clocked" CPUs! T/ERC and ERC processors used on selected boards are recycled and vigorously tested 68040 CPUs operating at 40MHz - an excellent guaranteed and competitively priced alternative.

What the Magazines think...

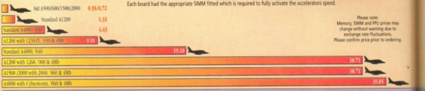
Blizzard products have consistently achieved the highest magazine accolades and awards!

Amiga Shopper *"...1260 is destined to become the ultimate object of desire for A1200 owners."* - 91% STAR BUY Award
Amiga Computing *"...If you want the fastest Amiga in the World, get this board."* - 92% BLUE CHIP Rating
Amiga Format *"...Ride on the fastest A1200 in the World..."* - 95% GOLD Rating

OUR RANGE HAS WON MORE AWARDS THAN ANY OTHER

JUST COMPARE THE PERFORMANCE FIGURES FOR YOURSELF!

Comparative MIPS performance figures measured using SysInfo.
Each board had the appropriate SIMM fitted which is required to fully activate the accelerators speed.



Please note:
Memory, SIMM and FPU prices may change without warning due to exchange rate fluctuations.
Please confirm price prior to ordering.

THE PERFORMANCE OF OUR NEW POWER UP BOARDS WITH POWER PC PROCESSORS!

COMPATIBLE WITH ANY STANDARD VIDEO SIGNAL AND S-VHS!

Pro-GRAB™ S-VHS 24RT Plus

NEW LOWER PRICES!

Take a signal from TV with SCART output
Use either Satellite signals or VCR output of TV or Video, including S-VHS
Grab images with your Camcorder including S-VHS

The revolutionary S-VHS **ProGrab™ 24RT Plus** with Teletext is not only the best way to get crisp colour video images into your Amiga, from either live broadcasts or taped recordings, it also costs less than any of its rivals. This real time PAL/SECAM/NTSC* 24-Bit colour frame grabber/digitiser has slashed the price of image grabbing on the Amiga and, at the same time, has received rave reviews for its ease of use and excellent quality results. ProGrab™ has earned honours from just about every Amiga magazine and Video magazines too! And... with ProGrab™ you needn't be an expert in Amiga Video Technology, a simple 3 stage operation ensures the right results... **Real Time, after time.**

STAGE 1

Select any video source with S-VHS or composite output. This could be your camcorder, TV with SCART output, satellite receiver, domestic VCR/player or standard TV signal passing through your VCR/player... the choice is yours.

STAGE 2

With ProGrab's software, select an image you wish to capture using the on screen preview window and Grab (because the hardware grabs frames in real time, there's no need for a freeze frame facility on the source device). Once grabbed, simply download and view the full image on your Amiga screen. ProGrab also includes a Teletext viewing and capturing facility from either TV or satellite sources.

STAGE 3

Use the 'grabbed' image with your favourite word processor, DTP or graphics package. ProGrab really does make it that simple!

ProGrab™ 24RT Plus...

- Supports all recent Amigas and is also fully AGA Chipset compatible. You can render images in any Workbench screen mode resolution including HAM8 mode (Amiga RAM permitting).
- Saves and Loads images in IFF/ILBM, IFF/ILBM24, JPEG, BMP, PCX, and TARGA file formats. ProGrab saves animations as Anim5 files and animations with sound (requires PCMCIA interface and separate sound sampler) as Anim5 + 8SVX files. A range of image processing effects, palette computing routines (AGA only) and dithering methods are featured in ProGrab Version 2.6.x. Photogenics fully supports ProGrab with a custom 'Loader' to enable grabs directly from within the program - this direct input method will save YOU more time when handling large images.
- Software has built in mono and colour animation facilities. Number of frames is dependant on Amiga RAM.
- Release 2.6.x software now includes...
  Additional Teletext Facilities - with either terrestrial or satellite TV signals.
  Larger Preview Window - double resolution and four times area of previous ProGrab software.
  International Support - now compatible with composite PAL, SECAM and NTSC - straight from the box.
  Larger Preview Window - double resolution and four times area of previous ProGrab software.

ProGrab™ 24RT Plus costs just £99.95 LOWER PRICE!
and is supplied with just about everything you'll need◆...

- ProGrab™ 24RT Plus Digitiser
- Latest ProGrab Version 2.6.x Software
- Mains Power Supply Unit
- Parallel Port Connecting Cable
- User Manual
- Input sockets for Composite and S-VHS.

◆ A video source cable will be required to match your own equipment - ask us for details.

**Standard ProGrab hardware is PAL/SECAM/NTSC compatible. Interface mode options are available with PAL & SECAM only.*

ProGrab supports any Amiga with Kickstart 2.04 or later and a minimum of 1.5Mb free RAM.

PCMCIA Interface - A600/1200

ProGrab's optional PCMCIA Interface includes the latest version software and extends performance for serious or professional users - offering the following benefits...

- Faster downloading times (up to FIVE times quicker)
- Improved animation speeds of up to 11fps (mono) and 3.5fps (colour)
- Saving of animations direct to your Amiga's hard drive
- Freeing of your Amiga's parallel port for use by a printer or other peripheral
- Sound sampling and animation capabilities (separate sound sampler required, see right)

PCMCIA Interface LOWER PRICE! **£29.95**

Stereo Sound Sampler

Fantastic high quality 8-Bit Sound Sampler specifically designed for use with the ProGrab 24RT digitiser (PCMCIA Interface is also required).

This Hi-Fi sampler features the same 30MHz A/D convertor used in the ProGrab, maximum frequency is therefore only limited by your Amiga hardware.

Featuring a band width of 40Hz to 20KHz, quality is higher than standard samplers.

Hi-Fi Stereo Sampler **£24.95**

ProTel™ Terrestrial/Satellite Teletext Decoders

Amiga or PC add ons for grabbing terrestrial or satellite TV Teletext pages which don't need a dedicated Teletext TV/Video to operate... required signal is simply the output taken from a standard VCR or a TV that provides a suitable video out signal. Once information has been downloaded, ProTel allows you to view pages instantly... no more waiting whilst your TV searches!

ProTel™ for Amiga

Stand alone unit designed to match your Amiga allowing files to be exported as ASCII Text for use in your word processor or saved as IFF graphics for DTP presentations.

ProTel™ Amiga Teletext Decoder £44.95

ProTel™ for PC NEW

ProTel PC Teletext Decoder - internal ISA PC card:

- Friendly software
- Capture speeds of 1000 pages in 2 mins
- Background tasking • Easy configuration
- Save page files (ASCII, BMP, ProTel formats)
- Native 32Bit Windows '95 application
- Requires 386DX PC and 8Mb RAM (12Mb Rec.), Windows '95/3.1 or Workgroup 3.11, VGA display, Mouse and 1 free 8/16Bit ISA slot - MINIMUM
- PAL and SECAM

ProTel™ PC Teletext Decoder £29.95

Camcorder User commented... "If you're looking for a high resolution 24 bit digitiser then, at this price, ProGrab 24RT represents great value for money."

ProGrab™ - Voted as **The Best Video Hardware** *product for the Amiga. Especially pleasing because the award comes from Amiga Shopper magazine's readers... Satisfied Customers!*

ProGrab™ - Amiga Format 95% **Gold Rating** *and comments like... "ProGrab 24RT Plus is quite simply the digitiser to get", "Incredible value for money - no other digitiser offers so much for so little" and "Offers far more features than any other digitiser near the same price"*

ProGrab™ - Amiga Shopper 95% **STAR Buy** *and remarks like... "Sharp, crisp and faithful to the original colours, we were mightily impressed" and... "Highly Recommended. Whether you are a Videographer or a Graphic Artist, look to the ProGrab 24RT Plus. It's a winner"*
Hi-Fi Stereo Sampler - Amiga Shopper 92% STAR Buy, April 1997.

CU Amiga said ProGrab™ is... "Just the job for beginners and semi-professionals on a tight budget" and, "very hard to beat. For the money, nothing can touch it"

AT GH WE MAKE EVERYTHING EASY...

PHONE GH...

We welcome all major credit/debit cards with NO TRANSACTION SURCHARGES

ORDERING BY POST OR FAX...

Please include your Name, Address and preferably daytime and/or evening phone or fax number with your requirements. If using your debit/credit card include its number and valid from/expiry dates (also issue number with Switch cards). Please make cheques (allow 7 days clearance), Drafts or P.O.s payable to... **Gordon Harwood Computers Limited**

GH PRICES...

All UK and EC customers - VAT is included at the standard rate of 17.5% to all prices. UK overseas Armed Forces Personnel may be exempt VAT - please ask for details.

DELIVERY...

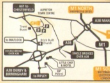
We offer prompt shipment with fully insured express delivery options throughout the UK, Europe and Worldwide at a modest cost. If ordering by mail, please call to confirm the appropriate delivery charges.

GH WARRANTY...

Manufactures' standard warranties apply or, ask about GH's comprehensive extended options which are always recommended for professional users to minimise costly down time - details available on request.

ALL PRICES INCLUDE VAT

...and are shown for personal users only. Business users please ask for VAT Exclusive prices.

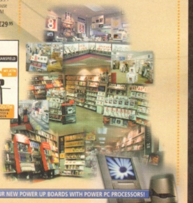


If you prefer, you can collect your Amiga goods from us...

AN EASY DRIVE FROM MOST AREAS,

We're open Monday to Saturday 9.00am until 5.00pm...

PLEASE CALL TO CONFIRM AVAILABILITY BEFORE MAKING A LONG JOURNEY TO VISIT US.



THE PERFORMANCE OF OUR NEW POWER UP BOARDS WITH POWER PC PROCESSORS!

THE APPLE ALTERNATIVE

IF YOU'VE REALLY GOT TO BUY A NEW SYSTEM TODAY...
the next best thing to your Amiga could be an **Apple Macintosh.**

BUT WHY MACINTOSH?

- Just like your Amiga, all Macs are Motorola based but have had the advantage of PowerPC RISC CPUs for some time... remember, even Pentium PCs in Windows™ systems are still merely CISC processors!
- Like the Amiga, Macs were designed from the outset to be an easy to use system with their windowing environment fully integrated - not bolted on later. And... Macs not only outperform other PC systems, but have recently become very competitively priced too.

- **Software:** there are over 1800 titles specifically written for PowerPC Macs alone, plus 1000s from pre PowerPC days which are still compatible. Industry standards such as Word, Pagestream, Word Perfect, FileMaker Pro, Excel, Quark XPress, Photoshop and many others have been developed for Macs.
- **Creativity:** Apple still lead the creative world - With 80% market share in colour publishing, most web sites being authored with Macs and post production video editing dominated by the Macintosh - you can see the advantage. ***The magazine you are reading now was published using Macs!***
- **Internet and Communications:** all Macs are Internet Ready - many include built in modems and fax facilities etc. Standards like Netscape & Internet Internet Explorer mean the Net is easily accessed.

INTERNET READY

- **Connectivity and Expandability:** all Macs have built in networking and external SCSI connections - adding printers, drives, cameras, scanners etc. really is plug & play!

- **Education and Edutainment:** Macs offer you the advantage of all the latest software from the likes of Dorling Kindersley, Microsoft etc. to help with the whole family's learning skills.
- **Multimedia:** Apple is the World's Number 1 Multimedia PC Vendor!

- **Recreation and Games:** Some of the top selling games are available on the Macintosh these include: Ultimate Doom, MYST, Dark Forces, Rebel Assault II, Descent, Full Throttle and many more!

WANT ONE?

Well, if you really want more performance without paying the earth - and you want it now... contact Harwoods - it may be easier than you think, especially with our finance facilities catering for both business and personal users *(subject to status).*

Why not call and see a range of Apple Products as well as an extensive range of peripherals, accessories and software - our staff will be pleased to assist in your enquiries about Macintosh systems.

Apple Authorised Reseller & Service Provider

gordon harwood computers

GH 15TH ANNIVERSARY
1982-1997

We've been providing Commodore products since 1982 and today supply a range of 100% Motorola based systems including Blizzard and Cyberstorm along with video products and other peripherals...

01773 836781

PICK UP THE PHONE AND ORDER TODAY FOR DELIVERY TOMORROW

For your protection all Cards are fully Security Checked

OFFICIAL ORDERS...

We supply Central, Local Government and Education Departments along with Major PLCs

'FAST-FAX'...

on 01773 831040 for a Rapid Response to your Quotation or Order Requirements!

GORDON HARWOOD COMPUTERS

DEPT CUA/7 • NEW STREET
ALFRETON • DERBYSHIRE
DE55 7BP
Tel: 01773 836781
FAX: 01773 831040
e-mail: info@ghc.co.uk

Power Tower

AMIGA SUPERSTAR

■ Price: £149.95+ see box for options ■ Supplier: Power Computing © +44 (0) 1234 85 1500

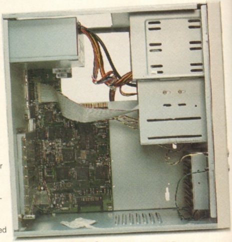
Power Computing throw down the gauntlet with an impressively easy to construct tower case

Step aside, Micronik, ICS and Eyetech, there's a new heavyweight challenger in the ring and it has a mean streak in its eye. Power Computing's new tower case has a sleek professionalism about it which makes the rival options look uncomfortably DIY in comparison.

It has the purpose built look of the Micronik Infinitiv case, the solidity of the ICS tower and the easy fit mentality of the Eyetech EZ-Tower. When we initially saw this box on display at Computer '97 we could see that this was a seriously clever piece of kit, enough so that we were dubious about the likely price. Now it's here for us to give the full treatment, and the price turns out to put it on the same footing as its direct rivals.

When we produced our definitive guide to putting your Amiga in a tower back in our April, May and June 1997 issues we were expecting them to be popular, but we never quite expected the huge response they generated, nor the explosion of interest in tower systems that has followed. With no middle ground between the cheap but limited low end Amigas and the expandible but expensive high end Amigas, a towerised A1200 has always seemed like a popular option, but it is one that neither Commodore not Escom pursued.

The A1200 motherboard is simply not designed to be treated this way, so it's a lot of work to make a tower cased Amiga work properly. All that custom construction means conversions were generally considered a luxury. A drop in the prices of Zorro cards and increasingly powerful software has gone a long way to changing all that. Possibly an even more important factor has been an increased desire for the facility with which a tower cased Amiga can have storage devices added to it. The prices of 3.5" hard drives has plummeted and the desire for Zip drives, LS120s and most particularly CD-ROM drives has soared. Next on the horizon is the advent of the Blizzard PowerPC accelerators for the A1200, recommended for use in towers only, so yet more people are going to be faced with the thorny issue of fitting their A1200 to a tower case.



▶ A clean, simple interior. The very model of easy construction.

Made to measure

Fitting is what the Power Tower is all about. With an elegant, fully shielded metal case, a good range of drive bays and a 200 Watt power supply, the only thing the Power Tower seems to miss sitting on your desk is a "Powered by Amiga" logo , but even this may well be coming soon. Turn the tower around and you will see that like the Micronik Infinitive case, this sports proper cut – outs on the back for the rear ports of the Amiga 1200's motherboard. The panel is oddly recessed into the back of the case, the reason why being clear when the case is opened up. Inside is a cradle, not unlike the one in the Micronik Infinitiv case, which holds the motherboard proper. The cradle fits into the side of the case, a small L fold bearing the cut – outs.

To connect the A1200 motherboard, it is first necessary to remove it completely from the original case. The plastic clamshell of the console box is unscrewed and the keyboard

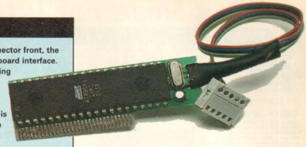
▶ It may look at first a little like a deep sea fish which has swallowed some traffic lights, but I like it.

The available bundles.

Bundle 1 - Case, keyboard interface, floppy drive extension cable, power connector, keyboard. - £149.95
Bundle 2 - As above plus 4-way buffered IDE interface and IDEFix '97 software. - £180.90
Bundle 3 - Amiga clone, as bundle 2 with an A1200 motherboard fitted. - £349.95
Bundle 4 - As above, but also including 24x CD-ROM drive, 1.7GB hard drive, Blizzard 68030/50 accelerator, 16MB fast RAM- £729.95
Power can also supply custom bundles, phone them for details.

Cunning Connections

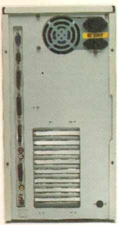
Not content with walking all over the opposition on the power connector front, the Power Tower has similar plans for the LED connections and the keyboard interface. While each of its rivals has ways of coping with the trick of connecting the power, disk drive and hard drive LEDs, none is as simple as the one the Power Tower provides, all the wires soldered to a PCB which just plugs straight down into the appropriate place on the motherboard. The keyboard interface is stunningly simple. A socket is already mounted in the rear of the case. This is linked, via a push-on connector, to a small PCB bearing a single chip which plugs straight into the keyboard ribbon header. The adaptor is a PC keyboard only type, unlike some autosensing rivals, but even the most ardent PC haters shouldn't be bothered about this; you might not like their OS, but they've got better keyboards very cheap. One is, in fact, included in the price of the tower.



▲ Here it is, a keyboard interface of supreme simplicity. Works damn well too.

ribbon, power LED and disk drive connectors removed. The metal shield then has to be taken off. Small fold over tabs hold the top part in place, a few moments work with a long fingernail is all that is necessary to remove this. The bottom half of the shield has cutouts which the ports poke through, small hex head socket screws holding it in place. Removing these can be a little fiddly, but a t-bar socket wrench is thoughtfully supplied, which makes the task very simple.

Once the shield is entirely removed, the motherboard can be simply slotted into the cradle and the hex head socket screws put back in to hold it in place. We found the machining of the cut-outs to align perfectly, making this process a breeze. Two machine screws connect the other end of the board to the cradle via a couple of hex clearance bolts, and a couple of stand off pillars support the motherboard in the middle, keeping the whole lot perfectly stable.



Powering the board isn't entirely straightforward. PC motherboards, not to mention the new generation of Amiga baby AT form factor boards designed for this type of case have a standardised power connector on them, the A1200 doesn't. The correct voltages are all there, but getting at them poses a bit of a problem. ICS opted for a connector which leads out of the tower and back into the socket at the back, a good if slightly ugly solution. Eyetech made it prettier by connecting an adaptor to the floppy power lines on the board, but this does not supply the -12v line, so necessitating a flylead pin which slots into the centre of the rear power connector, not an ideally reliable solution.

The Power Tower has the best method yet. Fundamentally similar to the ICS solution, the cable is custom made rather than custom modified. The rear connector is a flush mounting L-shaped fitting which doesn't project beyond the case at all, only the similar device available as an optional extra for the Micronik case comes close. With a Micronik Zorro board fitted, the ICS and Infinitiv cases can draw their power internally, but the Power Tower can go this route too.

Once all this is done, and the connections have been made (see box above) all that remains is the floppy disk drive. The internal unit slots into the drive bay behind a proper faceplate, and a long floppy cable is supplied. It was here that we hit our first problem – the hole in the faceplate for the disk eject button was too small. Power told us that this hadn't happened for them, so we assume that the one we got shipped had the wrong faceplate in it, and you shouldn't have the same problem.

Finally any hard drives, CD-ROM drives etcetera can be connected in the normal manner. There are two 3.5" floppy drive bays, one with the faceplate pre-installed, and a further two internal hard drive bays. Three 5.25" bays complete the score, giving the Power Tower as much drive room as the ICS tower but rather less than the huge Eyetech EZ-Tower.

Smooth operator

So how does it all work? Once assembled there is not a huge amount to choose between tower solutions, but this comes out very well. In terms of stability it is excellent, something you would expect from the solid metal case.

The keyboard interface, one of the more variable items, is as good in operation as it is in assembly, mapping the full Amiga keyset including a keyboard reset and running smoothly and flawlessly. It does well on the looks front too – instead of the normal little LEDs on the front, this has small banks of shielded LEDs in red, green and yellow which glow gorgeously from under the ridges on the front panel. A sticker set is included to let you label all the rear ports. The reset switch can be connected one of two ways – if you install a Micronik Zorro board you have a reset line supplied, otherwise you have to solder header pins onto two surface mount components on the A1200 motherboard. This is a real let down for the otherwise ultra easy construction. It is a pity there is not a header on the keyboard interface to take advantage of the keyboard reset line the way there is on the Ateo keyboard interface used in the ICS tower.

Connection of IDE devices is best left to the optional 4-way buffered IDE interface and excellent IDEFix '97 software which Power supply for an extra £30.95. Like the ICS case, this uses the same basic layout as the Micronik boxes, so Micronik PCMCIA right angle adaptors can be used, as can Micronik (or presumably Ateo) busboards. We hit something of a problem with this case when it came to fitting a busboard – the keyboard interface sticks out too much, getting in the way. This isn't a fatal problem as with care the two can be jammed together, but it's not the best arrangement either.

The Power Tower is simply the best tower case we have yet tested. It is as easy to construct as it is ever likely to get, and comes with good instructions. Like all things in this world it is flawed, certainly, but none of the flaws are too bad. If you've been eyeing the plethora of options for tower conversions lately, your decision has just been made rather easier.

Sure there are still advantages of the other towers – the EZ-tower's large bay capacity and dual motherboard facility, for instance – but for the majority of users who simply want the extra expandability and bigger power supply a tower provides, this heavyweight from the Power stable KO's the opposition in the first. ■

Andrew Korn

POWER TOWER

System Requirements: A1200 motherboard, screwdriver, basic DIY skills

Ease of use 94%
Every effort has been made to ensure the easiest possible construction.

Performance 92%
A few minor niggles, particularly reset and busboard problems, otherwise excellent.

Value for money 88%
Not stunningly cheap but everything is included.

OVERALL
The most professional tower case yet, a very hard act to follow.

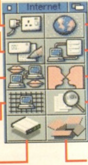
93%

All You Need For Internet And Comms!

netconnect v2

NetConnect v2 is even easier to connect to the Internet! Launch the new Wizard GUI, choose your modem, enter a few user details and let the Wizard do all the rest for you! Simple! With version 2 you don't even need to worry about the provider - everything is automatic, everything is point and click! ***Amiga Format*** concluded about **NetConnect v1** (June 97 issue): "Almost the perfect package for the Amiga Internet user", "If you need to get online, this is the easiest way to do it" and "It's good value for money too - especially the bundle including the 33.6K modem." We have listened to our NetConnect v1 users, noted their comments and added some other new features. NetConnect v2 is available on CD-rom and floppy disk.

11 Commercial Programs within NetConnect v2!



AMITCP-GENESIS

NetConnect v2 users will be the first people to use this new TCP stack! Based on AmiTCP Pro, we have added a number of changes - new Wizard, MUI based dialler, multi-user support, 'events' control, status window (time on 'net, connection speed), new prefs.

MICRODOT-II

A superb combined email and newsreader within one GUI! Contains all the major features you would expect - MIME attachments, support for POP3/APOP, search function, multiple signatures, multiple user support, Arexx port etc.

AMIRC

Chat online with friends about topics, join conferences, organise mass meetings. The IRC is one of the most addictive elements of the Internet - AmIRC is the best Amiga IRC client.

AMTELNET

Telnet into remote computers (from anywhere in the world) - edit files on a computer in Germany from your Amiga, maintain directories for your web pages, check the status of the network, play online games.

AMTERM

AmTerm is a communications package which allows you to connect to a BBS, to another user (direct link), transfer files via a serial connection (Amiga<>Amiga, Amiga<>PC etc).

VOYAGER-NG

Voted the best Amiga web browser by CU Amiga - supports SSL for securing ordering, HTTP 1.1 (for the fastest web access) fastmem AGA support (use fast mem to store images) and very soon JAVA™, Javascript and AGA fastmem support!

AMFTP

AmFTP is the ultimate Amiga FTP client. Download/upload programs from any FTP site, also supports ADT to allow you to download the latest files from the Aminet and Archie to search FTP sites for files.

AMTALK

A direct chat client for the Amiga. Acts as an online answerphone service for people to leave messages. You can talk directly 'realtime' to friends on the Internet.

NETINFO

NetInfo is a cool tool for analysing the network and the people connected to it - 'finger' your friends to see if they are online, 'ping' servers to find the response speed.

X-ARC

X-Arc is the Amiga's answer to WinZIP™ - automatically decode LHA/LZX/ZIP files, edit the contents of these archives, create your own archives. Full integrates with NetConnect v2!

NetConnect v2 is a state-of-the-art Internet package aimed towards Amiga users wanting to connect for the first time (absolute Internet beginners), those who have been connected a few months (novices) and now, due to the keyfile nature of the software, is suitable for advanced Internet users who want to use the modules contained within NetConnect with their existing TCP stack. **NetConnect v2 enhancements include:**

- **MIME Prefs** - Central MIME prefs interface means that you only need to setup file types once with on nice interface! This saves masses of time and effort (esp. for beginners).
- **Setup Wizard** - makes configuring your ISP a doddle. Choose your modem, enter some user details and then the rest of the process is completely automatic!
- **New programs** - AmTalk, NetInfo and X-Arc (a brand new WinZIP™ style archive management tool. Downloads lha/lzx/zip files from Voyager etc, auto-extracts them into X-Arc's GUI and allows you to control the files).
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Extras pre-configured**: MIME types (CD only), datatypes (CD Only), online help files etc
- **Octopus** - allows you to create multiple dock bars with point and click ease - just drag the icons you have created into the icon bar! NetConnect v2 is pre-setup with its own icon bar for ease of use.
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Printed manual** - understand NetConnect and the Internet quickly and easily (advice from NC users!)

NetConnect v2 CD [contains many extras: datatypes, MIME types (for www browsing) and much more]	£52.95
NetConnect v2 Floppy Disks [only contains the core programs & online help documents]	£54.95
NetConnect v2 Upgrade from v1/v1.1 [registered NetConnect v1/v1.1 users only]	£call!

vapor software

If you are not interested in purchasing NetConnect you can also buy Vaporware Products individually either by disk, a keyfile sent via e-mail (quickest and cheapest method) or on CD-rom (currently only Voyager-NG and Genesis can be purchased on CD-rom) - CD versions have added extras such as pre-setup MIME types (VNG), HTML documentation etc.

	On CD	*By Disk*	*By EMail*
Genesis - New TCP/IP Stack for the Amiga [Available December]	£28.00	£22.00	£20.00
Miami - TCP/IP Stack for the Amiga	n/a	£28.00	£26.00
Octopus - Brand new dock bar creator [Available December]	n/a	£12.00	£20.00
Voyager Next Generation	£28.00	£22.00	£10.00
Microdot-II	n/a	£20.00	£18.00
AmIRC	n/a	£20.00	£18.00
AmFTP	n/a	£20.00	£18.00
AmTalk	n/a	£17.00	£15.00
X-Arc	n/a	£17.00	£15.00
AmTelnet + AmTerm Package Deal	n/a	£20.00	£18.00
AmigaNCP - Amiga to Psion series software	n/a	£27.00	£25.00

- *5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+*

internet informer

Still unsure about connecting to the Internet? Confused by all the acronyms such as 'ISDN'? Confused about the costs? Wondering whether your Amiga can access the Internet? No need to worry any longer - we have released issue 2 of our 'Internet Informer' for Amiga users. A leaflet that offers you all the information you require in order to get your Amiga onto the Internet. Modem choices, software that is available, service providers for the Amiga, questions and answers. It also contains information about NetConnect and what we can do to get you onto the Internet. For your free copy, call us or write to us.

ACTIVE

Oval House, 113 Victoria Road, Darlington, DL1 5JH

Tel : 01325 460116
Fax: 01325 460117
E-Mail: sales@active-net.co.uk
http://www.active-net.co.uk

DELIVERY CHARGES

S'Ware	- £1.00 for UK delivery - £1.50 for EU delivery - £2.00 World delivery
H'Ware	- £4 for 2-3 day delivery - £6 for next day delivery - £call for Saturday delivery

Make cheques/P.O.'s payable to Active Technologies and send to the address listed opposite. We can accept credit or debit card orders. For any additional information call us ASAP!

high quality modems

K56Flex modems are here! Download software and web pages **upto** twice the speed of a 28.8 modem. 56k modems will operate at 33.6K speeds for uploading but you can cut your phone bills drastically when using the 56K technology! Isn't it about time you upgraded that 14.4 or 28.8 modem? For further information about the new K56Flex (Rockwell developed) technology contact us!

We only supply quality **branded** modems (Dynalink UK Ltd or Diamond SupraExpress), which may cost slightly more than their unbranded competitors, but they ship with a 5 year warranty, the knowledge that a UK company offers support/information and you are buying a modem with quality (Rockwell based) components.

K56Flex modems need to connect to another K56Flex modem in order to use 56K technology (make sure your provider supports K56Flex technology). Call for further technical details.

56K and 33.6K External Data/Fax/Voice Modems

- Quality **branded** Dynalink or Supra modem
- 33600 bps DATA/FAX/VOICE modem - true v34. Throughput to 115,200 (230,400 for K56Flex) BPS via V.42 bis data compression
- Group 1, 2 & 3 send/receive FAX (14.4)
- Voice Commands - DSVD upgradeable (by software)
- V.80 (video conferencing) capable
- Call Discrimination
- Fax on demand
- Caller ID and Distinctive Ring enabled
- Simultaneous voice and data (S.V.D.)
- Speakerphone for hands-free operation
- Upgradable ROM chip
- Includes headphones/microphones - for voice control
- 5 year warranty
- Serial cable included

56K
SupraExpress
56 Kbps Faxmodem with Speakerphone
DIAMOND

£104.95

modem pack options

Various money saving packs are available. These are all based on either the 33.6k, 56k or ISDN modem plus a a collection of extras. Call us for other pack options if you have your own pack idea!

Code	Pack Contents	£ Prices
PK01	33.6 Modem & STFax	£ 89.95
PK02	33.6 Modem & NetConnect	£109.95
PK03	33.6 Modem & NetConnect & STFax	£119.95
PK04	33.6 Modem & NetConnect & Hypercom1 & STFax	£149.95
PK05	33.6 Modem & NetConnect & Hypercom3Z & STFax	£169.95

ADD £25 for a 56k Modem (instead of the 33.6k model)
ADD £50 for an ISDN Terminal Adapter (instead of the 33.6k model)

- All packs come with one month free connection to a major Internet Service Provider
- Choose between the CD or Floppy disk version of NetConnect with your modem pack
- NetConnect = v2, STFax = STFax Professional

high speed serial cards

new models!

from.. £44.95

The ***Hypercom*** range of high-speed serial cards offer your Amiga the fastest connection to the Internet, for comms and fax transfers. Available for the Amiga 1200 (these serial cards are placed within the internal clock expansion port - leaving the PCMCIA port and trapdoor free!), A1200 Towers and Zorro-II/III based machines (Zorro version suitable for A1500/2/3/4000 or a A1200 tower). These cards are currently the fastest serial cards available for the Amiga (upto 460,800bps connection). The Hypercom 3/3Z cards also ship with a buffered high speed parallel port which will drastically improve printing speeds on a laser (4x speed). The Hypercom 3/3Z cards contain a 9-pin and standard 25-pin serial ports whereas the Hypercom 1 ships with one 25-pin port. Serial and parallel drivers included. English documention.

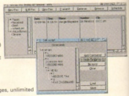
Hypercom 3Z

Model	Machine	Specifications	Price
Hypercom1	A1200	1 x 460,800bps highspeed buffered serial port	£44.95
Hypercom3	A1200T	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec buffered parallel port	£89.95
Hypercom3Z	Zorro-2/3	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec buffered parallel port	£79.95
Hypercom4	Zorro-2/3	4 x 460,800bps highspeed buffered serial ports	£99.95
Hypercom3i	Zorro-2/3	Expansion module for Hypercom 3Z/4 offering 2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec buffered parallel port. Just plugs onto the card, no Zorro.	£59.95

stfax professional

£29.95

STFax Professional is new commercial fax program for the Amiga containing the sort of advanced features you would find within commercial PC fax software. STFax has been in the shareware for the last few months, and the brand new commercial "professional" version offers even more advanced features plus voice control for voice modems - use your Amiga as a digital answer machine, create a fax on demand service (ideal for small businesses. Allows your customers to contact you at any time and use fax on demand to remotely download facsimile information about your products!) and create advanced voice control scripts.



- **Full Fax Features:**
  - Support for all fax/modem classes (1, 2, 2.0)
  - Phonebook (store all your favourite fax and telephone numbers)
  - Scheduler (store fax messages to be sent at specified times)
  - Reports (quickly see when a fax was sent and received)
  - Datatypes support for image conversion
  - Printer driver to redirect all print-outs to a fax file (print from Wordworth, Pagestream etc!)
  - Viewer for viewing outgoing/incoming fax messages
  - Fax forward (forward faxes to another machine)
- **Advanced Voice Features:**
  - Use your Amiga as an answer machine (digital messages, unlimited storage space!)
  - Advanced voice scripting - create your own voice network or fax on demand service
  - Use your modem as a telephone (make and receive calls via STFax Pro and your modem)
  - Remote access (listen to your messages from an external source. ie. from another country!)
  - Caller-ID (see exactly who has called and left you a message)
- **Your Own Mini-BBS:**
  - One or more secure 'doors' (access areas)
  - Point and click setup
  - Allow users to upload files and send messages
  - Custom greetings and menus

Input devices round-up

PEN MOUSE PM-AM300

Features	80%
Responsiveness	75%
Construction	65%
Value for money	65%

OVERALL

Good, idea flawed design

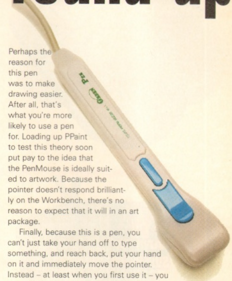
70%

Product: Pen Mouse PM-AM300
Resolution: 250dpi
Cable: 5 ft.
Price: £12.95
Supplier: Golden Image (0181 900 9291)

Picking up this mini-hooveresque mouse for the first time wasn't the highlight of my Amiga owning life. Not only do you need to hold this implement in a totally different manner than an ordinary mouse, you also need to get to grips with the fact that it doesn't feel much like a pen either. It's larger than a pen, and doesn't have the same balance – in part due to its bulky but lightweight plastic construction. The other disadvantage is the lead. Being on the top end of the unit, it takes more effort to drag it around the mat, and the lead continually brushes against your knuckles and fingers – distracting to say the least.

When I first placed the PenMouse on the mat, the pointer didn't respond well to the pen's movements, looking more like it was being dragged through patches of oil and syrup than over a mouse mat. The solution to this problem was found when I turned the mouse mat over, and used the pen on its foam-backing. The pointer then moved around in a much more controlled manner.

The buttons on this device aren't ideally situated either. The larger (and lower) of the two blue plastic buttons is the "left" mouse button, but clicking it invariably causes the pen to move on the mat, resulting in less accuracy when double-clicking icons, for example. Because the "right" mouse button is immediately above, you don't need to move your index finger very far to click it, but then you can't hang a different finger over it like you can with a standard mouse.



Perhaps the reason for this pen was to make drawing easier. After all, that's what you're more likely to use a pen for. Loading up PPaint to test this theory soon put pay to the idea that the PenMouse is ideally suited to artwork. Because the pointer doesn't respond brilliantly on the Workbench, there's no reason to expect that it will in an art package.

Finally, because this is a pen, you can't just take your hand off to type something, and reach back, put your hand on it and immediately move the pointer. Instead – at least when you first use it – you need to look at the pen lying on the mouse mat, pick it up, position it in your hand comfortably (not easy), position it on the mat at the right angle, and *then* move it. Far too much hassle for my liking.

LOGIC SPEED MOUSE

Features	92%
Responsiveness	85%
Construction	78%
Value for money	58%

OVERALL

Great idea, shame about the price. Would it get used ?

78%

Product: Per4mer Turbo wheel.
Price: 59.99
Supplier: Epic Marketing (0500 131 486)

If you've still got that copy of Geoff Crammond's Formula One Grand Prix knocking about, load it up and plug this device in to your joystick port. There are two parts to it – a footpedal unit and a steering wheel column, complete with what the manual calls "instrumentation decals" (that's "stickers" to you and me).

Although intended for IBM compatibles, the Per4mer works very well with Microprose's Formula One Grand Prix, as it should do with any other games that can make use of analogue joysticks for input.

Also provided in the box are some "suction cups" (rubber feet) which pop into the holes on the underside of the steering column and prevent the whole thing from slipping all over the desk should you get too enthusiastic with your driving.

The lead from the steering column plugs into a socket on the lead coming from the footpedal unit, which then plugs into the joystick port. The leads aren't quite as long as would be ideal – the one from the footpedal to the joystick port could do with lengthening by a few feet – but they do the job.

Geoff Crammond's masterpiece definitely benefits from the added realism provided by the Per4mer. The steering column – although being constructed out of plastic – has the sort of resistance that you would expect from a steering wheel, although when you let go, it clicks back into a central position, and when turning from left to right you can feel it click in the central position rather than rotate smoothly through it.

The acceleration and brake pedals – which act as "up" and "down" on a joystick – also have just about the right amount of inertia for your foot to push against, but after calibrating them for use with Formula One Grand Prix, only the last half inch of movement in the pedals seemed to have any effect.

The two buttons on the rear of the steering wheel (behind the ones you can see on the front) are ideally situated for changing gear as you race around Silverstone, and the extra control provided by the analogue wheel is intuitive. The instrumentation decals – sorry, "stickers" – look tacky, and the four buttons on the steering wheel column could be done away with, as they don't seem to have a purpose.

If you can put up with the bulky plastic design, and don't mind shelling out 60 quid on a peripheral that may not see as much use as perhaps it should, at least consider the Per4mer.

Despite the tacky name and appearance, it brings a whole new dimension to the world of racing, and without another steering wheel/pedal combination to set it against, there really isn't a lot to fault its functionality.

Product: Logic3 SpeedMouse
Resolution: 300 dpi
Cable: 5.5 ft.
Price: £9.99
Supplier: Various stockists

This shiny white mouse is slightly larger than a standard A1200 one, and the casing slopes down at the back rather than up, meaning that you can't rest the palm of your hand on it's back when you're using it.

Despite feeling different, the screen pointer responds very well to the movements of the SpeedMouse, though not with any great speed as you may be led to believe. The buttons, described as "Feather-Touch" on the box are clunkier than those on an A1200 mouse, making a clicking sound which starts out as satisfying but quickly begins to annoy. At least you know when you've pressed one, I suppose.

On the whole, given the price of this mouse, you'd be far better off going for the Alfa Data MegaMouse-Plus. In comparison, the Logic3 SpeedMouse has a shorter cable, fewer buttons and a lower resolution. And it's 4p more expensive. Vive la difference.

LOGIC3 SPEED MOUSE

Features	75%
Responsiveness	82%
Construction	78%
Value for money	70%

OVERALL
Below-par mouse with extra clicky buttons.
76%

AMIGA
SUPERSTAR
ALFA DATA

Product: Alfa Data MegaMouse-Plus
Resolution: 400dpi
Cable: 8 ft.
Price: £9.95
Supplier: Golden Image (0181 900 9291)

Offering three buttons and a squarer, flatter design than your average mouse, the MegaMouse-Plus is nothing special to look at. Three microswitched buttons have been squeezed into the space of the usual two, and the design of the mouse doesn't lend itself to nestling up against the palm of your hand unlike mice which raise up at the back. Having said that, it's delightfully easy to use.

Functionality wise, there's nothing to fault about the MegaMouse-Plus. It glides over the mat and the micro-switched buttons are much nicer than those on a standard A1200 mouse – clicking quietly (unlike those on the Logic3) and responsively – no risk of aching fingers here.

Another bonus is the extra-long eight foot lead. It may not sound like much, but if you have a tower situated some way from your monitor and keyboard, you shouldn't have any trouble situating the MegaMouse on your desk. At 400dpi, you don't need to move it about much either. The enhanced resolution means this mouse won't have to clock up as many miles as one with a lower dpi.

ALFA DATA MEGAMOUSE-PLUS

Features	95%
Responsiveness	98%
Construction	92%
Value for money	98%

OVERALL
Well worth a tenner of any-ones's money, penny.
96%

AMIGA
Caption
AMIGA

Product: Amiga Technologies' Amiga Mouse
Resolution: 300 dpi
Cable: 5 ft.
Price: £9.95 (Including mouse pad)
Supplier: Power Computing (01234 851500)

The response of the official Amiga mouse is good – the two microswitched buttons are very similar to those on the Alfa Data MegaMouse-Plus in terms of feel, and of a comparable size to those on the cheaper MegaMouse-E. Its asymmetrical design would seem to suggest that it is intended for use by right-handed people, but using it as a left-hander doesn't cause any problems – it may not fit the palm as snugly, but it's not uncomfortable. The left mouse button even has a smooth circular depression on its surface, which means your index finger can rest there whilst you're moving the mouse on the mat, and the buttons themselves have a similar movement to those on the MegaMouse-E – perhaps a little too much, but nothing seriously distracting.

For under a tenner, you could do far worse than this mouse (the Logic3, for instance). What's more, it even comes complete with an official mouse mat, and both sport the Amiga logo, just in case you forge what it is you bought it for.

AMIGA TECHNOLOGIES' MOUSE

Features	80%
Responsiveness	92%
Construction	88%
Value for money	82%

OVERALL
If you like the Amiga logo, chances are you'll like this.
86

ACTION PAD AM

Features	60%
Responsiveness	72%
Construction	75%
Value for money	62%

OVERALL

A short length of black cable with a weight on the end. **67%**

Product: ActionPad AM
Cable: 4.5 ft.
Price: £9.95
Supplier: Golden Image (0181 900 9291)

This control pad is nothing special. You can use it in place of a joystick, but you can't use it in place of a CD^{32} pad in games like Guardian, because it doesn't have all the buttons. As far as control pads go, at least this one's well built. It looks and feels quite sturdy, without being too heavy. Unlike the standard CD^{32} joypad, you don't feel like you're holding a glasses case.

When I started using this pad, I could only get the blue fire button working. The other buttons appeared to be redundant. Loading OnEscapee, the other buttons behaved just like the blue one. Yes, this is a control pad with 4 separate fire buttons.

The two buttons on the front of the pad could do with being slightly larger, as the right hand side of the unit looks quite bare. They don't feel as hard-wearing as the directional pad, and to make things worse, the lead is shorter than an ordinary mouse lead, which, frankly, is unforgivable for a joypad.

Action Pad AM
Logic3
SPEED

MEGAMOUSE-E

Features	76%
Responsiveness	86%
Construction	80%
Value for money	88%

OVERALL

Cheaper than a MegaMouse-Plus, but you get what you pay for **82%**

Product: MegaMouse-E
Resolution: 300dpi
Cable: 5 ft.
Price: £4.95
Supplier: Golden Image (0181 900 9291)

After using a 400dpi mouse, the loss of 100dpi is quite noticable. Returning to MCP's preferences to adjust the threshold and acceleration, and we're back to a more respectable level of control. One thing you cannot do with MCP, however, is give a two-button mouse three buttons, so the loss of a button from the MegaMouse-Plus is also something to mourn.

Rather than raising up at the back, the casing for this mouse raises in the middle, so it feels a lot like the Logic3 to hold – not that it's a bad thing. The buttons aren't quite as responsive as those on the MegaMouse-Plus, but they're much nicer than those on the Logic3. Another loss is three feet of cable, as this mouse only has the standard five-foot lead attached.

You could argue that the five pound reduction in price makes up for all these shortcomings, but for my money, I'd much rather spend that extra fiver than put up with the MegaMouse-E.

PRIMAX MATER TRACKBALL MOUSE

Features	94%
Responsiveness	84%
Construction	96%
Value for money	80%

OVERALL

Near-perfect design, but a little overpriced. **90%**

Product: Primax Mater Trackball Mouse
Resolution: 200dpi
Price: £39.99 (Inc. Mouse It software)
Supplier: Epic Marketing (0500 131 486)

Trackballs are funny things, and most of them look like "aesthetics" were an afterthought of the designers. Not so with the Primax Master. To be honest, it wouldn't look out of place in Q's workshop.

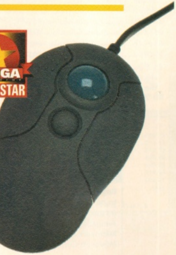
As this unit was designed for a PC, you need a free serial port to plug it in to, the LogiMouse software and a serial adaptor – both of which are provided in the form of Mouse It, which costs £4.99 separately.

The whole unit is an ergonomic masterpiece – the buttons on either side of the little racing-green ball offering a concave section and some raised "knobbly bits" – possibly for easy operation with wet fingers. The whole thing feels quite natural to use – your hand just rests over the unit and immediately feels at home.

The only design quirk I found was that of the middle button. It's in the centre of the unit, just below the trackball. It might be more intuitive if it were placed above the trackball on the front of the unit.

All in all, this is a comfortable and robust looking unit. At £40, it could be considered over-priced, but it should last a lifetime.

AMIGA SUPERSTAR



Ultimate Blitz CD

■ Price: £19.95 ■ Supplier: Guildhall Leisure ✆ 01302 890000

All things Blitz, on a single CD...

Blitz Basic is by no means a new language (even the latest version on the CD is two years old). It may have been around for a very long time, but it's arguably the best version of BASIC on the Amiga. Two of the key strengths of Blitz Basic are its interface to the Amiga OS libraries and the ability to use inline assembly statements. These make it suitable for a broad spectrum of programmers, as games like Skidmarks are testament.

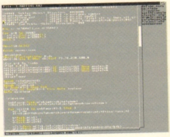
What's on the CD?

So, the validity of having Blitz Basic on CD is not in question. But what is it that's likely to make you part with your cash and buy it? Maybe it's the price: £20 is pretty cheap for a complete package like this, and there's tons of bonus stuff like PD disks, disk magazines, support software and tutorials, all dedicated to Blitz Basic.

Maybe it's the lure of programming: BASIC is one the simplest languages to learn, and there's more than enough meat in the Blitz extensions to keep you learning and discovering for a very long time. Plus, if you make the migration to using the standard Amiga libraries then you'll learn a lot of the principles of Amiga programming, something that is useful no matter what language you use.

Or maybe it's the social aspects: like most good things on the Amiga, Blitz Basic has a large following. You can join user groups and share knowledge, and help promote the Amiga. There's plenty of contact information in the Blitz User International disk magazines, and loads of contributions from the Internet.

Ok, so the most likely people who are going to be interested in this CD are those wanting a cheap and simple way to start using their Amiga for more than just playing games or writing letters. These criteria are almost fulfilled, as the price is good and the language is easy. But, the final piece of the jigsaw isn't quite there.



▲ The Blitz Basic editor.

What's missing?

The CD lacks something that would have made it really great: integration. It appears (unfortunately) to be another one of those shovelware titles. A nice, cheap collection, but with nothing much holding all of the parts together.

Take the installation script, for example. It seems to do the bog-standard Blitz Basic installation, omitting little things like making use of the unarchived resources on the CD. This is even more disappointing because a lot of the provided (standard) examples require those resources.

And then there's the fact that some parts are out of sync with others, as some of the examples fail to compile because of a "duplicate type" error (which is often caused indirectly by some other file, making it a difficult problem to find and fix). This is quite understandable, but it means that aspects of the system must have been upgraded without testing the examples. Something which is likely to drive the intended audience (beginners) quite mad.

Another fairly minor annoyance is that Blitz Basic sources cannot be viewed with a standard text viewer nor created with a standard text editor, so you're forced to use the supplied editor. For some reason this editor does not follow the Amiga Style Guide but uses its own way of doing everything, from scroll bars to file requesters (although it is integrated with the compiler).

After many hours of browsing through the CD, a more OS-friendly replacement editor was found, but it would have been nice to have this as an up-front installation option.

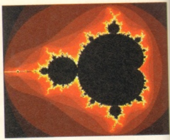
Quibble free

If you can get over the disappointment of the installation and the lack of a guided tour of the contents then you'll probably get a lot out of this CD. It's a shame that the Blitz user group didn't spend some time to polish up these aspects and make this a brilliant CD, but as it stands there's a lot there for your money. Just add a little perseverance and enthusiasm and it'll do you just fine. ■

Jason Hulance

BASIC

Beginners All-purpose Symbolic Instruction Code. A language which was designed to be suitable for beginners. It's also commonly used by even expert programmers to do quick and simple prototyping. There are many different versions of BASIC on the Amiga, dating back to one done for the original Amiga by a small company called Microsoft. In fact, BASIC is the language which formed the foundations of the Microsoft Corporation (which ought to explain their continued fixation with it!).



▲ You can write mandelbrot renderers...

ULTIMATE BLITZ CD
Developer: ACT

System Requirements:
A600

Ease of use.............................78%
The language is BASIC, so it's nice and simple. But the CD wastes its potential and omits help and guidance that would have made it great.

Performance.............................85%
Blitz has the potential for really fast code, and it's built on top of a simple-to-use language.

Value for money.............................89%
This is where this CD wins: great value.

OVERALL
An excellent language and a good compilation of extras.

85%

AMIGA® REPAIRS

Analogic is a recommended repair centre in the UK by Amiga Technologies

COMPUTERS AND MONITORS

WHILE-U-WAIT!!!

Attention Dealers

Ring/Fax Now for best trade prices and terms on Repairs, Spares, Floppy Drives, Hard Drives, CD Rom Drives and Memory Upgrades.

Please call for a better than price match deal

- FAST TURNAROUND
- 120 DAYS WARRANTY ON ALL REPAIRS
- £10.00 EXTRA CHARGE FOR WHILE-U-WAIT SERVICE
- PICK UP & DELIVERY CHARGES£7·05 EACH WAY
- A1500/A2000/A4000……£QUOTATION

A500, A500+ & A600
£39·95

A1200
£49·95

MEMORY UPGRADES

A500	Upgrade to 1 Meg	£13·95
A500+	Upgrade to 2 Meg	£19·95
A600	Upgrade to 2 Meg	£19·95

UNBEATABLE PRICES
Please call for latest best price

	0Mb	4Mb	8Mb
A1200	£39·00	£49·00	£65·00

INTERNAL FLOPPY DRIVES

A500/A500+/A600/A1200 …….£24·95

APOLLO ACCELERATORS

1230 Lite	£69·95
1230/50	£119·95
1240/25	£139·95
1240/40	£199·95
1260/50	£279·95

Heavy discount on SIMM prices when bought with an accelerator

4Mb	£15·00
8Mb	£29·00
16Mb	£59·00
32Mb	£120·00

SCSI CD-ROMS

Quad Speed SCSI + Squirrel…….£139.00

IDE CD-ROMS

Hitachi 16 max……£79.95

MODEMS

BABT APPROVED + NCOMM SOFTWARE + CABLES
33.6k….£79.00

LOLA GENLOCKS

L1500………£169·95
L2000S……£349·95

SIMPLY THE BEST AFTER-SALES SERVICE

GUARANTEED SAME DAY DESPATCH (Subject to availability)

NEW

TRADE IN YOUR AMIGA FOR A PC

NEW

WE BUY DEAD OR ALIVE A1200 AND A4000
RING US FOR A REASONABLE OFFER FOR YOUR A1200/A4000 COMPUTER OR JUST MOTHERBOARD IN ANY CONDITION

AMIGA COMPUTERS

A500 With PSU + Mouse + Mat	£79.95
A500+ With PSU + Mouse + Mat	£89.95
A600 With PSU + Mouse + Mat	£99.95
A1200 Magic Pack	£249.95
A1200 With 80MB Hard Drive	£279.95
A1200 With 170MB Hard Drive	£319.95
A1200 With 810MB Hard Drive	£379.95
A1200 With 2.1gig Hard Drive	£469.95
A2000 (Available)	Call
A4000 (Available)	Call

- **HEAVY DISCOUNTS** ON MEMORY UPGRADES AND ACCELERATORS WHEN BOUGHT WITH A1200
- **EXTENDED WARRANTY** UP TO 5 YEARS AVAILABLE ON ALL A1200 COMPUTERS

2·5" IDE HARD DRIVES

All hard drives are preformatted, partitioned with Work Bench loaded and include cable & software

60MB	£55.00	540MB	£129.00
80MB	£65.00	810MB	£159.00
170MB	£69.00	1.4 gig	£199.00
260MB	£86.00	2.1 gig	£299.00
420MB	£120.00		

2.5" IDE Cable & Software (If bought separately)……………….£9.95

3·5" IDE HARD DRIVES

2.1 gig	£159.00	4.2 gig	£249.00

Please call for other capacities

CHIPS ✣ SPARES ✣ ACCESSORIES

ROM 2.04	£18.00	A600/A1200 KEYBOARD	£29.95
ROM 2.05	£19.00	SCART LEAD	£14.95
A500/A500+ KEYBOARD	£29.95	MONITOR CABLE	£14.95
AMIGA MOUSE + MAT	£14.95	SQUIRREL INTERFACE	£50.00
A500/A600/A1200 CIA	£12.00	SURF SQUIRREL	£89.00
		A520 MODULATOR	£18.00

A500/A600/A1200/POWER SUPPLY……………£24.95
A1500/A2000/A3000/A4000 POWER SUPPLY……………CALL

* All chips are available ex-stock
* Please call for any chip or spare not listed here

ANALOGIC
ANALOGIC
ANALOGIC

Analogic Computers (UK) Ltd
Unit 6, Ashway Centre, Elm Crescent,
Kingston-upon-Thames, Surrey KT2 6HH

Open Mon-Fri 8·00am-5·30pm, Sat 9·00am-5·00pm Fax: 0181 541 4671

Tel: 0181 546 9575

★ All prices include VAT ★ All prices & specifications subject to change without notice ★ Fixed charge for repair does not include disk drive/keyboard
★ We reserve the right to refuse any repair ★ P&P charges £3·50 by Royal Mail or £7·05 for courier ★ Please allow 5 working days for cheque clearance
★ All sales/repairs are only as per our terms and conditions, copy available on request.

PDScene

Steve Bye has finally got over the excitement of Christmas (bless him) and is just about calm enough to try out some new games on disk.

★★★★★	Totally blinding
★★★★☆	Good
★★★☆☆	Average
★★☆☆☆	Substandard
★☆☆☆☆	Oh dear

Online Games #16

- Type:Games compilation
- Available from: OnLine PD. 1, The Cloisters, Halsall Lane, Formby. Liverpool. L37-3PX. Tel: 01704 834 335.
- Price: 75p

This 100% full disk contains no less than six games and surprisingly for this type of disk most of the programs on here are either quite playable or at least interesting. Dragon Pyramids is clone No.66740 in the Dragon Tiles series but has some good graphics to leer at and multiplayer modes.

Personally I could never understand how anyone could enjoy such a simple game where you just click on matching tiles, takes all sorts I suppose? Divumex is another clone, but this time of the 8-bit classic Xevious, and rather spiffing it is too.

Nice smooth scrolling with edible scenery and of course that naff gun sight on your ship makes for many a stroll down memory lane. Maze is a chase-your-mate type of maze game. Player 1 gets a 15 second head start then player two must try to catch him/her. Sounds like something my sister used to play at school.

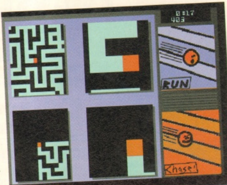
TurboSmash is this months Arkenoid clone. As you would expect it's very playable and has a bat, a ball and lots of bricks in it. Wormout 2097 is one of those horrid worm games. You have to wiggle awkwardly around the screen avoid the edges and collect the goodies, not my idea of how to spend a weekend.

Nicely presented though. Rise Of The Rabbits is the most outstanding game on this disk as far as I'm concerned. It's a Dynablaster type game for 2-4 players. The idea is simple, the first player to collect four stars hidden on the screen is the winner.

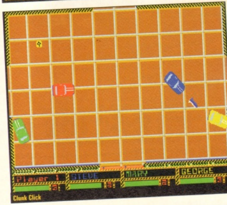
There are seven other goodies to pick up as well such as extra lives, speed up etc. To move around the play area you have to move the blocks that are in your path by dropping bombs, and hopefully killing an opponent too if you are lucky or skilful.

A drinks cabinet, three friends and ROTR will do me for this weekend, ta very much.

★★★★☆



Online Games #16



Clunk Click

Turbo Invaders

- Type: Shoot-Em-Up
- Available from: Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26-2SH Tel: 0161 723 1638
- Price: £1 plus 75p P&P per order.

As the author of Turbo Invaders confesses, the graphics in this game are not up to much, but luckily TI is the type of game where you can get away with dodgy graphics because of the rather crafty gameplay.

TI is so easy you will find yourself on level 12 or better on your first attempt. This may be taking the 'ease them into the game' scenario a bit too far but it works. There are 22 levels to complete and you simply shoot at everything that moves.

The game is probably closer to Galaxians than Space Invaders as the enemy don't hang around too long. There are three types of enemy to splat and some power up's to collect to enhance your weapons.

TI is nothing special but it could provide a few hours of blasting mayhem for us old timers. Usage of grey matter is not required.

★★★☆☆

AmiPets

- Type: Cyberpet sim
- Available from: F1 Software. 1 Lower Mill Close, Goldthorpe, Rotherham. S63-9BY. Tel: 01709 888 127
- Price: 80p plus 75p P&P

Last month I reviewed a CyberPet game called Choki, it didn't go down too well I am afraid. I won't bore everyone explaining what CyberPets are again, I did that last month, anyway if you don't know what a CyberPet is now you probably never will.

This disk has not one, not two, but three (you lucky people) different 'pets' for you to play with, this includes a spider, Sheep and a Smiley face. But the big difference, and this is significant, is that these pets run as Workbench toys in their own little windows.

My main criticism of Choki last month was the whole pointlessness of it all, now we do have a point, a Workbench toy that can be fiddled with when you are say printing, downloading or just need a short distraction from your work.

The whole idea is still a bit crap as far as I am concerned but at least there is now some reason to it all. As I said there are three pets on this disk which is a little misleading really as they are all the same program but with different graphics.

You can create your own pets by changing the graphics if you wish and the documentation explains how to do it using a paint program.

The icing on the cake I suppose is that you can save the current status of your pets. AmiPets is a big, big improvement over what I have seen so far but I am still unconvinced whether much fun can be squeezed out of your Amiga and a CyberPet sim.

★★☆☆☆

Clunk Click

Type: Racing game

Available from: PD Power 15 Lovetot Avenue, Aston. Sheffield. S26-2BQ
Tel: 01374 150972

Price: 50p +75p P&P

The idea behind Clunk Click is fairly straight forward; smash up your opponents cars either by firing missiles or crashing into them. You can play with 1-4 human players or with a combination of up to 7 computer controlled cars.

Amipets

The race track is an arena, in other words you just whiz around a static screen, there are four exits on the screen with a wrap-around effect for quick escapes should you feel the need.

During the game there are items to be picked up that will enhance your chances of success like missiles, cash, extra speed and extra energy. The normal way of playing the game is via a championship that you can set up, but there are also practice options.

Before each race you also get a chance to buy and sell items in the shop. So far so good. In theory the game sounds like it could be quite a lot of fun, in practice the game is okay.

The graphics let it down a little and for me the gameplay just doesn't offer enough to keep my interest. Playing against other human players does improve the fun-factor considerably though.

This is the type of game most will have a few plays with then keep it in a disk box to play later, but probably never will. I haven't taken the mickey out of Clunk Click too much because it was written by a 15 year old and he claims it to be his first releasable game. I would be quite proud of Clunk Click if it were my first game.

★★★☆☆

Snakeman

Type: Arcade/puzzle

Available from: OnLine PD. 1, The Cloisters, Halsall Lane, Formby. Liverpool. L37-3PX.
Tel: 01704 834 335.

Price: 75p

Game of the Month

Snakeman is a direct copy of an old Commodore 64 game called Oil's Well. As far as I recall I have never played the original but if it was half as addictive as this version I really wish I had.

You control a snake's head with your joystick, when you move it around the maze collecting the 'pills' (a lá PacMan) it leaves a 'body' that musn't be touched by the roaming baddies. You can't pass over your own trail, but you can erase it by pressing fire to go into reverse gear. That's it, you gobble up the pills, eat the baddies and collect any bonuses that you can find all in a set time limit.

Bonuses on offer are extra lives, extra time, points and baddie slow-downs. The old KISS addage (keep it simple stupid) has been put to full use in this game and it works a treat. Classic addictive fun. The graphics are of course 8-bit style ie; basic and bland, but you really don't care once you get caught up in the game.

Although there are far too many unoriginal games around and we need to see some new ideas, this type of game is worth the disk space. I haven't had so much fun since Tottenham Hotspur got a new manager.

★★★★★

Waponez IV

Type: Shoot-Em-Up

Available from: Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26-2SH
Tel: 0161 723 1638

Price: £1 plus 75p P&P per order.

This demo version of Waponez IV only gives you two levels to play with, it's £5 to register for the full version and apparently you even get some documentation with it too!

Waponez IV is a shooter in the mould of that old classic '1942', the enemy waves are very similar and the puny weapons you start with are frustratingly... er, puny, as is usual in this type of game.

In fact I gave up trying to blow away the enemy and just dodged my way through a level, which is quite short, but I got my just deserts when I had to face the obligatory end of level monster, in this case a space ship with a penchant for crushing you every tenth shot.

After learning my lesson I played the game properly and eventually arrived at the end of the level with some decent fire-power and slayed the sucker. Okay, it was fun once I had learnt the general patterns of the alien craft and I guess that is what it's all about.

The vertical scrolling scenery judders along a bit (good old Amos) and the graphics are semi-prehistoric but passable. There is a lot to enjoy here if you are into retro-gaming and this one is a touch above the average Amos PD blaster.

★★★☆☆

DRAGON'S PYRAMIDS 4:58
STOP
MOVES
RESTART
TILES: 120

Online Games #16

PD Utilities

Little Steve Bye has a wail of time rummaging his way through this month's pick of the PD crop.

★★★★★	Totally blinding
★★★★☆	Good
★★★☆☆	Average
★★☆☆☆	Substandard
★☆☆☆☆	Oh dear

Comms Guide

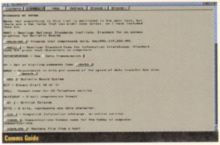
Type: Tutorial

Available from: OnLine PD. 1, The Cloisters, Halsall Lane, Formby. Liverpool. L37-3PX.
Tel: 01704 834 335.

Price: 75p

This tutorial, produced in AmigaGuide format, explains how to set up hardware and software on your Amiga to connect to Bulletin Boards and the Internet. It goes into fairly high detail on subjects such as Fidonet, e-mail and FTP.

The only problem is that this guide was written in 1994 and hasn't been updated since. So don't expect Comms Guide to cover the more recent developments of the Internet. Although the general info is still valid and will be helpful to most newcomers they will learn some out of date information, which is exactly what this guide sets out to avoid.


Comms Guide

Any beginner will have to bare this in mind and not take any variables as gospel. Luckily most of these variables like phone costs, MODEM speeds, Internet addresses, contact numbers etc. Are not fatally serious so this guide is still valid as long as a touch of common sense is applied by the reader.

Total beginners could use this guide to connect their equipment and download more recent tutorials from Bulletin Boards or the Internet. An update to the guide could make it indispensable. ★★★☆☆

Phuture Trax Vol 1

Type: Music collection.

Available from: 17 Bit, 44 Cecil Street, Walkden, Manchester. M28-3LE
Tel:0161 702 6737

Price: £1 plus 70p P&P

This is the first release from someone called 'SLC'. This 2 disk musical extravaganza contains 8 techno style music mods that can be played from a simple, but ugly, menu. You can boot the disks or use the supplied hard drive installer.

As you listen to the music you can read the obligatory scroll text and as is usual with this type of production, that's about it. The

Utility of the Month...

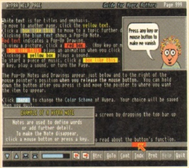
Hypra

Type: Hypertext application

Available from: OnLine PD. 1, The Cloisters, Halsall Lane, Formby. Liverpool. L37-3PX. Tel: 01704 834 335.

Price: 75p

If you need to compile a disk magazine, E-book with your own sounds and pictures, Quiz games, user manuals or catalogues look no further because Hypra can do all the above and more. No programming is required at all to create your book or catalogue and Hypra will give your work a very nice look and feel.


HYPRA HELP PAGE
Guide for Hypra Authors
Page 999
Press any key or mouse button to make me vanish
▽ △ Rtrc GoTo Cont Indx Prnt Help Quit

White text is for titles and emphasis.
To move to another page, click the yellow text.
Click a box like this to move to a topic further d
Clicking the blue text shows a Pop-Up Note.
Red text indicates a Pop-Up Drawing.
To view a picture, click a red box . (Any key or m
A box like this plays an animation when you click
Clicking a yellow box plays a sound.
To start a piece of music, click a box like this .
M key, play a sound, or turn the Page.

The Pop-Up Notes and Drawings appear just below and to the right of the mouse pointer's position when you release the mouse button. You can hold down the button after you press it and move the pointer to where you want the item to appear.

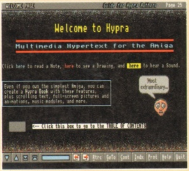
Click here to change the Color Scheme of Hypra. Your choice will be saved when you quit.

EXAMPLE OF A HYPRA NOTE

Notes are used to define words
or add further detail.
To make the Note disappear,
click a mouse button or press a key.

a screen by dragging the top bar up

o read about the button's function.



Welcome to Hypra

Multimedia Hypertext for the Amiga

Click here to read a Note, here to see a Drawing, and here to hear a Sound.

Even if you own the simplest Amiga, you can create a Hypra Book with these features, plus scrolling text, full-screen pictures and animations, music modules, and more.

<-- Click this box to go to the TABLE OF CONTENTS

To create your book all you need to do is assemble your text files, pictures and sounds and put them on a disk with the Hypra program. A bit of work is then required to link your pictures and sound with the text and to create links and buttons, colour schemes and the like but it is all explained clearly in the Hypra manual, which is of course displayed using Hypra. Once you have finished your book you can have all the files squashed by around 50%, which is useful. Hypra will unpack the files automatically of course. Few will have any problem learning to use Hypra if they read the superbly written documentation.

Basically if you can create simple AmigaGuide documents you will have no trouble at all with this. The main program has been written using Amos Pro and possibly Amos Pro's Interface language, the only drawback is the non-Workbench look but luckily Hypra looks good anyway. Hypra will work on all Amiga's 1.3 to 3.1, PAL, SECAM and NTSC are automatically catered for and your production is hard drive installable by simply dragging the Hypra drawer onto your drive. What more could the programmer do? A great piece of work and well produced. ★★★★★

Utility of the Month

g

con-
ore
the
make

Street,

called
con-
an be
You
hard

read
l with
The

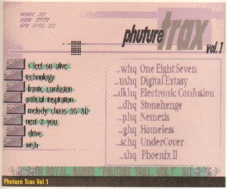
ty
he
th

em
bly

sibly
raw-

ur
ly

reat



Phuture Trax Vol 1

best tracks on here are probably 'I Feel So Alive' and 'Wish' but to be honest all the tracks are fairly samey. SLC is a talented musician though and I look forward to hearing more from this guy, if indeed SLC is a he! ★★★★☆

GrAC V2 Tutor

Type: Tutor

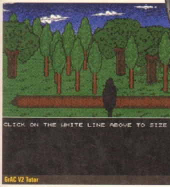
Available from: F1 Software. 1 Lower Mill Close, Goldthorpe, Rotherham. S63-9BY. Tel: 01709 888 127

Price: £4.99 plus 75p P&P

At the time of its release in 1994 GrAC (The Graphic Adventure Creator) was the first program of its kind on the Amiga. It gave non-programmers the chance to create very decent graphic adventure games in the style of Monkey Island.

But, GrAC has always suffered one major hindrance, the manual was, and still is, appalling. The GrAC program itself is well written and once you understand what you need to do is not too difficult to use, its certainly easier than programming a full game from scratch.

But, as I said, the manual turned what should've been simple step by step instructions into a mire of convoluted bits and bobs of information in what appeared to be a random order and even had some vital information missing too. This could explain why there have only been a handful of games released using GrAC. I reviewed a GrAC creation a few months back called World Of Magic by the way. GrAC is no longer supported by its original author so we can forget an official update to the program or manual. To atone for this step forward GrAC V2 Tutor, written by the near legendary Andy Gibson, all round good-bloke and responsible for many Amiga releases such as The Ultimate Quiz, AmosZine and DMC.



GrAC V2 Tutor

Andy has spent nearly a year deciphering the GrAC manual and has now decoded it into a digestible AmigaGuide document. The guide takes you through every step of game creation in plain English, including IFF screens as guides and examples, as well as all the game files required to follow the tutorial. Any GrAC owner that was frustrated with the original manual will welcome this guide with open arms.

It's a shame GrAC punters will have to lay out another fiver to get what should've been supplied with the original program, but having said that at least people will be able to use it now. GrAC plus this tutor will cost less than £12 which is still a bargain for a quality package.

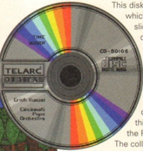
By the way, Andy has made sure this guide can't be used without the original GrAC manual by referring to certain extracts from the original manual. Wise. ★★★★☆

Computer Plus

Type: Art collection

Available from: Roberta Smith DTP. 190, Falloden Way, Hampstead Garden Suburb, London. NW11 6JE. Tel:0181-455 1626

Price: 90p plus 50p p&p



This disk contains 36 pictures which are displayed by slideshow on booting the disk up. The subject matter is mainly computer related. The quality of the pictures range from old black and white clipart to old hand drawn 32 colour pictures, most of this stuff has been doing the PD rounds for years.

The collection is a mish-mash from different sources and I am sorry to say not one picture stood out to me as being of any use at all. Considering the plethora of cheap CD's full of art work, most of which hold better quality work than this, I can't see the point of this disk.

Sure, people searching for art work that do not own a CD-Rom player may be interested but I think most will be highly disappointed with the low quality of the pictures on this disk. ★☆☆☆☆

Best of Aminet

It just gets better and better. It's hard to know quite where to start (or indeed where to stop) this month, as the Aminet was absolutely flooded with decent uploads.

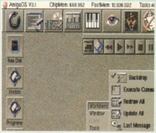
I always enjoy a decent demo, so I'll point you in the direction of demo/aga.AH97-INT.lha (437k) where you will find a compilation of three intro demos from the Amiganica Hungarica '97 scene party. Lights and Flares, the winner of the compo, has some nice illuminated plasma effects, but our vote went to the gorgeous plasma effects and great music of the far too short Lost Star.

Programmers should find a few things worthy of their attention this month, with dev/asm/ppcasmpk.lha (53k) a worthy starting place for those interested in getting PPC development underway before their PPC card turns up. If Blitz is more your thing, be sure to check out dev/mui/mui38dev-bb2.lha (197k) for everything the Blitz Basic programmer needs to use the MUI graphic user interface in their software.

On the games front those disappointed in Flyin' High should make their way over to game/patch/FlyinHighPatch.lha (80k) for a fix to improve handling, allow you to change the strength of your opponents and a few other tweaks. Those of you struggling with last months superb Foundation demo should try game/hint/FoundationHint.lha (19k) for some friendly advice.

Those looking to soup up their Workbenches have a couple of really nice uploads this month. One Amiga user, tired of the over bright MagicWB palette, has produced pix/back/GothbenchII.lha (417k), a bunch of gloomy backdrops with names like River of Angst - silly, yes, but there are some great backdrops there. Last but not least is util/wb/AmiLogo.lha (89k).

If you've ever wanted a spinning Amiga boing ball in the menu bar of your Workbench, this is the monkey for you, but alas it doesn't work with DOpus. Utterly useless, but it gets my vote for inclusion in Workbench 3.5.



Why Apple?

One day we all hope to see the rebirth of the Amiga with a PowerPC processor and other new features to enable it to compete again with today's systems. Sadly though, more than 2 years since Commodore's demise, little of substance has actually happened. We've seen prototypes and heard promises... we all hope to see new Amiga developments.

If you can't wait and need more performance today, without paying the earth - there's only one real alternative to consider... There's never been a better time to think Apple!

Only Apple offer you both desktop and portable computers that truly match the ease of use the Amiga brought to your desktop. Affordable Apple Macintosh systems have PowerPC RISC processors with thousands of off-the-shelf programs available in areas where the Amiga was always previously so strong.

And, if you need the most compatible of all computers, Macintosh is currently the only system that can run MacOS, DOS and Windows applications via optional DOS Cards or SoftWindows software.

PowerMac 5500/225

INTERNET READY
HERCULES

ONLY...
£1409
Just £9.50 Per Week❖

- PowerPC 603e
- 225Mhz
- 32Mb RAM
- 2Gb Hard Drive
- 12 Speed CD
- 15" Integral Colour Monitor
- 33.6bps Modem
- Design Keyboard
- 'Family' Software*

***FAMILY PACK SOFTWARE INCLUDES...**
• Claris Works • Ultimate Human Body 2.0 • KAI's Power Goo • Apple Telecom • Actua Soccer • Grolier Multimedia Encyclopaedia • Apple Magic Disney Collection V3.0 - WSL*, CLAIM YOUR **FREE** CD SOFTWARE PACK NOW INCLUDING HERCULES PRINT STUDIO!!!

(*Offer ends 31st December 1997)

PowerMac 4400/200

INTERNET READY

- PowerPC 603e
- 200Mhz
- 16Mb RAM
- 2Gb Hard Drive
- 12 Speed CD
- 15" MultiSync Colour Monitor
- Design Keyboard
- FREE Internet Connection Kit

...comprising of an Integrated collection of Apple and third party software needed to connect directly to the Internet easily! Perfect solution for Mac users who want Internet access today! (requires modem for Mac)

Apple Internet Connection Kit

ONLY...
£1174
Just £7.93 Per Week❖

PowerMac 6500/300

INTERNET READY

ONLY...
£2466
Just £16.63 Per Week❖

- PowerPC 603e
- 300Mhz
- 64Mb RAM
- 6Gb Hard Drive
- 24 Speed CD
- 15" AV MultiSync Colour Monitor
- Video & TV/Text
- 33.6bps Modem
- Design Keyboard
- *'Creative' Software

***CREATIVE STUDIO SOFTWARE INCLUDES...**
• All the software listed (left) in the 'Family Pack*' PLUS XTRA SPOFTWARE....
• Dabbler • Avid Cinema Install • Avid Cinema Workshop • PhotoDeluxe • Cubasis AV • DK Photo Sampler • PageMill • 3D World

Other PowerMacs

SHOWN BELOW IS JUST A SMALL SELECTION FROM THE VAST RANGE OF APPLE MACINTOSH COMPUTERS WHICH ARE CURRENTLY AVAILABLE...

Model	MHz	CPU	RAM	HD	CD	Display	TV/Text	Video	Modem	Keyboard	Price	Software Pack
PM4400	200	603e	16	2.0Gb	✓12	✗	✗	✗	✗	Design	£939	✗
PM4400	200	603e	16	2.0Gb	✓12	15" M/S	✗	✗	✗	Design	£1174	✗
PM5500	225	603e	32	2.0Gb	✓24	15" Integral	✗	✗	✓33.6	Design	£1526	FAMILY PACK
PM5500 Black Mac	225	603e	32	2.0Gb	✓12	15" Integral	✓	✓	✓33.6	Design	£1409	FAMILY PACK
PM5500 Black Mac	275	603e	32	4.0Gb	✓24	15" Integral	✓	✓	✓33.6	Design	£1996	FAMILY PACK
PM6500	250	603e	32	6.0Gb	✓24	15" AV M/S	✗	✗	✓33.6	Design	£1644	FAMILY PACK
PM6500	300	603e	64	6.0Gb	✓24	✗	✓	✓	✓33.6	Design	£2231	CREATIVE STUDIO
PM6500	300	603e	64	6.0Gb	✓24	15" AV M/S	✓	✓	✓33.6	Design	£2466	CREATIVE STUDIO
7700/233	233	G3	32	4.0Gb	✓24	✗	✗	✗	✗	Extended	£1644	✗

*• FAMILY PACK software is as detailed above (see 5500/225 offer)
• CREATIVE STUDIO software is as detailed above (see 6500/300 offer)

Portable Macs

SHOWN BELOW IS JUST A SMALL SELECTION FROM THE HUGE RANGE OF POWERBOOK MACINTOSH COMPUTERS CURRENTLY AVAILABLE...

1400cs/166 16Mb, 1300Mb HD, DS, CD	£1761
1400c/166 16Mb, 2000Mb HD, AM, CD	£2466
3400c/180 16Mb, 1300Mb HD, AM, 12 Speed CD	£2466
3400c/200 32Mb, 2000Mb HD, AM, 12 Speed CD, Ethernet	£3054
3400c/240 16Mb, 3000Mb HD, AM, 12 Speed CD, Ethernet	£3641
NEW G3/250 16Mb, 5000Mb HD, AM, 20 Speed CD, Ethernet	£4699

Type of PowerBook Display -
DS=Dual Scan Display, AM=Active Matrix Display

Newton Handhelds

SHOWN BELOW IS JUST A SMALL SELECTION OF NEWTON HANDHELD MESSAGEPAD PRODUCTS/ACCESSORIES AVAILABLE...

Newton 2000 MessagePad 8Mb, Backlit Screen **LIMITED..**	£586
Newton 2100 MessagePad 4Mb DRAM, Backlit Screen	£704
Newton 2000 Carry Case	£34
Newton 2000 AC Adaptor	£34
Newton 2000 Battery Pack	£28
Newton 2000 4Mb Flash Upgrade	£105
Newton 2000 Keyboard	£76

ALL current Newton models available along with their accompanying peripherals and software titles - CALL US

Please send the coupon or phone us - we'll rush you your FREE 'Why Macintosh' brochure pack

Mr/Mrs/Miss/Ms:
Initial(s):
Surname:
Address:
County or Country:
Postcode:
Daytime Phone:
Evening Phone:
Main use(s) of computer: HOME ☐ BUSINESS ☐ EDUCATI
Current computer and accessories:

Please cut out the coupon and return it FREE to...

GORDON HARWOOD COMPUTERS • FREEPOST MID04091 • Dept. CUA• NEW STREET • ALFRETON • DERBYSHIRE • DE55 9BR
Tel: 01773 836781 • Fax: 01773 831040 • e-mail: info@ghc.co.uk

specifications and GH prices are correct at time of going to press; however, they may fluctuate and we therefore reserve the right to amend them - please confirm prices before ordering. Software/Product packaging for bundled systems/items may not be included and is shown for illustration purposes

Why Macintosh?

Performance:

All Macs have the latest PowerPC *RISC* processors (poor old Pentium systems are still *CISC* designs). Even entry level desktop Macs run at 180MHz, with 350MHz powerhouses at the top of the range (Mac PowerBook portables offer up to 240MHz).

Software choice:

Over 1,800 native software packages (written specially for PowerPC Processor Macs) have been shipped since Power Macintosh was launched in 1994 - plus there are thousands of industry standards which can also be used. Industry standard programs such as Microsoft Word and Excel, Pagestream, Word Perfect, FileMaker Pro, Quark Xpress, Photoshop and many others were developed for the Mac.

Creativity:

- Macintosh still dominates the creative world with an 80% market share in colour publishing.
- 65% of post-production video editing is on Macs.
- Macintosh is the most widely used system for the creation of Internet web pages.
- Most magazines (including the one you're reading right now) are created on Macintosh.

Multimedia:

- Apple is the World's No. 1 Multimedia PC vendor.
- All desktop Macs have a fast CD-ROM drive as standard (many portables have internal CDs too).
- In 1995, 42 of the top 50 selling CD-ROM titles worldwide were developed on the Macintosh.
- Many Macintoshes have built-in TV with teletext so TV clips can be recorded directly to disk as QuickTime movies.
- Many Macintoshes have built-in video in and out, for direct recording to VCRs.
- Some Macintoshes have internal digital video editing facilities as standard and many others can include this facility with an easy upgrade.

ISDN, the Internet & Communication:

- Macs are Internet/e-mail ready and many include modems with full send/receive fax and answer phone. Adding an ISDN connection is easy.
- Industry standard web browsers, Netscape Navigator and Microsoft Internet Explorer, were developed for the Mac meaning Access to Worldwide Web sites is easy.
- QuickTime, the Internet's standard format for video files, or QuickTime for Windows, are both Apple products. Of course QuickTime comes as standard with every Mac.

Connectivity & Expandability:

- Unlike other PCs, all Macs have networking built in as standard, so connecting systems together and adding shared printers etc. couldn't be easier.
- All Macintoshes have an external SCSI connector as standard. Adding external drives, ZIP/JAZ and other cartridge drives, scanners etc. really is Plug-and-Play.
- Low-cost digital cameras can be plugged into the Mac for instant real image input.

Education & Edutainment:

- Being the World's No.1 education supplier, quality Macintosh titles are widely available. Dorling Kindersley offer superb packages like The Ultimate Human Body and there is a varied supply from other leading software publishers too.
- Because Macintosh is the preferred system within many educational establishments, high quality software is assured.

Recreation & Games:

- Top games like The Ultimate Doom, Myst, Rebel Assault II, Dark Forces, Descent, Afterlife, Lost Eden, Legend of Kyrandia, Full Throttle & The Dig have all been developed for Macs.

Output & Presentation:

- Connecting and using colour printers (from Epson, HP, Apple and others) to Macs is so easy and with photo quality output the results are truly outstanding.

PERIPHERALS

MONITORS...	
Apple 15" AV MultiSync	£292
Apple 17" 1705 TCO MultiSync	£269
Apple 17" 720 TCO MultiSync	£492
Apple 20" AppleVision 850	£1291
LASER PRINTERS...	
Apple LaserWriter 4/600PS - A4, 600dpi	£528
HP LaserJet 6MP - A4, 600dpi	£727
Apple LaserWriter 12/640PS - A4, 600dpi	£939
INKJET PRINTERS...	
HP 870Cxi DeskJet A4 Colour	£257
Canon BJC 4550 A3 Colour	£257
Epson Stylus 600 A4 Colour	£217
Epson Stylus 800 A4 Colour	£293
Epson Stylus Photo 6 Colour	£387
Epson Stylus 1520 A2Colour	£704
Epson Stylus 3000 A2Colour	£1350
CAMERAS...	
Apple QuickTake 200	£328
Kodak DC20	£163
SCANNER...	
UMAX Astra 600S - PhotoShop LE	£159

GRAPHICS TABLET...	
Wacom ArtPad II with PenTools	£116
STORAGE...	
D2 Quantum 2.1Gb External HD	£257
D2 640Mb Optical Drive	£351
D2 JAZ Drive inc. Cartridge	£241
D2 2400e 16 Speed CD Drive	£175
Micronet 2400E CD Drive (with 5 great software titles)	£210
COMMS...	
Global Village TelePort Internet (33.6, inc. Global Transfer s/ware)	£112
ACCESSORIES...	
Sony PC21 Speakers	£34
Macally Joystick	£38
Macally Gamepad	£26
FlightStick Pro Joystick	£80
Gravis Firebird Joystick	£99
Jetstick	£45
Apple One Year On-Site Maintenance Warranty	£18

LOTS MORE PERIPHERALS - CALL!

SOFTWARE

GRAPHICS SOFTWARE...	
Quark Xpress 4.0	£880
PageMaker 6.5	£504
Illustrator 7.0	£328
PhotoShop 4.0	£469
KPT/MetaTool Actions	£52
MetaTools Soap	£41
KPT Bryce II	£163
KPT Goo!	£41
FreeHand 7.0	£363
Alien Skin Eyecandy 3.0	£89
CorelDraw Suite Upgrade	£116
BUSINESS...	
Microsoft Office 4.2	£422
Microsoft Word 6.0	£288
Claris Works Office	£93
Claris Works to MS Office U/g	£210
Claris Em@iler 2.0	£49
Claris Organiser 2.0	£69
MYOB (Accounts) 6.0	£116
SoftWindows 3.0 (CD/3.5")	£88
SoftWindow '95 4.0 - CD	£93
UTILITY SOFTWARE...	
Norton 3.5	£79
After Dark 4.0 CD	£19
Adobe Acrobat 3	£187
Dr Solomon's (with 1Yr U/g)	£63
RAM Doubler 2.0	£41
Speed Doubler 8.0	£41

EDUCATION SOFTWARE...	
Grolier's Encyclopaedia	£35
Dorling Kindersley...	
20th Century Chronicle	£26
The Way Things Work 2.0	£28
Encyc. of Space & The Universe	£26
Ultimate 3D Skeleton	£21
Ultimate Human Body 2.0	£27
Virtual Reality - Cat, Bird, Dinosaur Hunter or Earth Quest	£21ea.
Encyclopaedia of Science 2.0	£26
World Reference Atlas	£33
Think and Talk... German, Italian, Spanish or French	£42ea.
Reading Development... Series 1, 2, 3 or 4	£26ea.
Teach Yourself Calculus	£18
Music Central	£26
Thinkin' Things 3	£14
LEISURE SOFTWARE...	
Actua Soccer	£28
SIM City 2000 CD Collection	£33
Warcraft II	£33
3D Landscape 2	£47
FA/18 Hornet 3.0	£39
Tonns Passage	£31
Wing Commander IV	£43
Marathon Trilogy	£28

BOOKS - Full Range, Call for details

❖ *BUSINESS FINANCE* ❖

Weekly finance prices are exclusive of VAT and are based on 3 year fixed cost Apple Commercial Credit Lease for business users.

PERSONAL FINANCE:

Finance is also available for individuals visiting our showrooms and paying a minimum of 10% deposit.

There's even a...

'Deferred Payment Plan'

- It's easy to buy your Mac with a GH Personal Finance Option
- Ask for details of one to suit you
- Example... Pay 10% Deposit on a balance over £1200 and then pay nothing for 4 months (subject to status and £18 arrangement fee).
- Written details are available on request

AT GH WE MAKE EVERYTHING EASY...

PHONE GH...

We welcome all major credit/debit cards with NO TRANSACTION SURCHARGES.

ORDERING BY POST OR FAX...

Please include your Name, Address and preferably daytime and/or evening phone or fax number with your requirements. If using your debit/credit card include its number and valid from/expiry dates (also issue number with Switch cards). Please make cheques (allow 7 days clearance), Drafts or P.O.s payable to... **Gordon Harwood Computers Limited.**

GH PRICES...

All UK and EC customers - VAT is included at the standard rate of 17.5% to all prices. UK overseas Armed Forces Personnel may be exempt VAT - please ask for details.

DELIVERY...

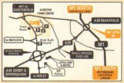
We offer prompt shipment with fully insured express delivery options throughout the UK, Europe and Worldwide at a modest cost. If ordering by mail, please call to confirm the appropriate delivery charges.

GH WARRANTY...

Manufacturers' standard warranties apply or, ask about GH's comprehensive extended options which are always recommended for professional users to minimise costly down time - details available on request.

ALL PRICES INCLUDE VAT

...and are shown for personal users only. Business users please ask for VAT Exclusive prices.



Why not visit our showroom and see a range of Macintosh products on demonstration...

AN EASY DRIVE FROM MOST AREAS,
We're open Mon to Sat - 9.00am until 5.00pm

PLEASE CALL TO CONFIRM AVAILABILITY BEFORE MAKING A LONG JOURNEY TO VISIT US.

Why Harwoods?

Gordon Harwood Computers was founded as a specialist Commodore dealer in 1982 and we're still supporting Amiga users today. We began supplying Macintosh systems in 1991 when it became clear that Commodore was failing to capitalise on the technological advantage it had. We needed to have products available that fulfilled the needs of our customers who were demanding...

- Systems with a future
- Systems with outstanding performance
- Systems with unsurpassed ease of use
- Systems without the problems and disadvantages associated with DOS/Windows, which still persist and trouble users even now.

Today we have grown to become one of the largest Apple Authorised Resellers in Europe. Our extensive product knowledge and solid support facilities emphasise our status as one of a select group of Apple Authorised Service Centres and accredited Apple Higher and Further Education Alliance Resellers.

This advertisement is an invitation to treat, not an offer to sell. Goods are not supplied on a trial basis. All transactions are subject to Harwood's Terms and Conditions of Sale, a copy of which is available on request. All Trademarks are acknowledged. E&O.E.

harwood computers

GH 15TH ANNIVERSARY
1982-1997

We've been providing Commodore products since 1982 and today supply a range of 100% Motorola based systems including Blizzard and Cyberstorm along with video products and other peripherals...

01773 836781

PICK UP THE PHONE AND ORDER TODAY FOR DELIVERY TOMORROW

ALL PRICES INCLUDE VAT @ 17.5%

For your protection all Cards are fully Security Checked

OFFICIAL ORDERS...

We supply Central, Local Government and Education Departments along with Major PLCs

'FAST-FAX'...

on 01773 831040 for a Rapid Response to your Quotation or Order Requirements!

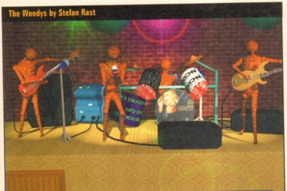
GORDON HARWOOD COMPUTERS

DEPT. CU6 • NEW STREET
ALFRETON • DERBYSHIRE
DE55 7BP
Tel: 01773 836781
FAX: 01773 831040
e-mail: info@ghc.co.uk

Art Gallery

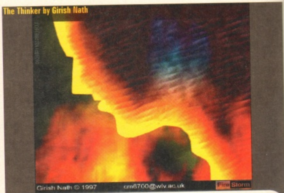
Are you a Digital Dali? Computer Carravagio? Send your pics to: Art Gallery, CU Amiga, 37-39 Mill Harbour, Isle of Dogs, London E14 9TZ.

The Woodys by Stefan Rast



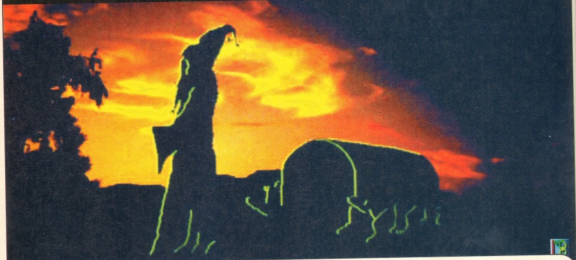
From the Easternmost tip of Germany, Stefan Rast sent us this humourous render produced on his A1200/030 with 10Mb of RAM using Cinema 4D v3.1.

The Thinker by Girish Nath



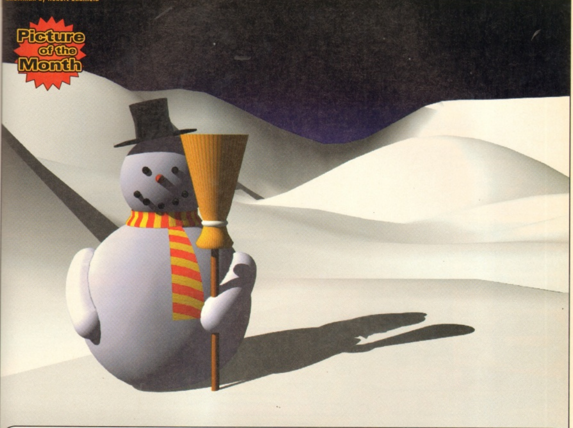
Girish used Brilliance to draw the basic outline of the face, then use photogenices to apply a variety of image processing effects giving this its subtly textured finish.

Rincewind and Luggage by Martin Berg



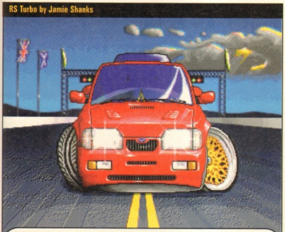
A simple picture from Swedish reader Martin Berg, who is obviously a major Terry Pratchet fan. It was drawn on a "highly expanded Amiga 1200" using Photogenics1.2, ImageFX 1.6 and PersonalPaint6.4. The draughtsmanship rather leaves something to be desired, but the colour and composition of the montage is very evocative.

Snowman by Robert Caulfield



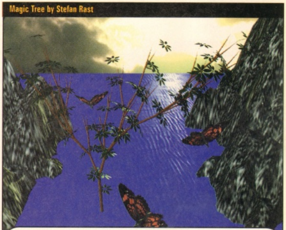
Robert, who is a multimedia technician for university college Warrington, generated this image in Lightwave 3.5 running on an A1200 with 18Mb of RAM and 50MHz 030 with FPU (Blizzard Mk IV). It is, as Robert says, hardly an original picture, but a nicely executed one. What's best, due to publication timing, we haven't had Christmas yet whilst you're now sick of it, so there.

RS Turbo by Jamie Shanks



An odd picture by Jamie Shanks. Apparently this was done in Dpaint, but there looks to have been some image processing effects used to generate the rough road, for instance.

Magic Tree by Stefan Rast



Stefan Rast returns with another Cinema 4D render. This one looks based on one of the tutorial renders, but I like it, he's used the lighting well.

It's January Sale time at Golden Image!

Amiga Mice

Replacement Mice	~~£6.95~~ £4.95
MegaMouse Plus (3 Button)	~~£14.95~~ £9.95
New Black Mouse 400dpi	~~£9.95~~ £7.95
Pen Mouse (ideal for CAD)	£12.95

Performance
97%

Ram Boards

RAM CARDS A1200

A1200 with clock and 4Mb *(not upgradeable)*	£49
A1200 with clock 33MHz FPU and 4Mb	~~£64~~ £59
A1200 with clock and 8Mb	£65
A1200 with clock, 33MHz FPU and 8Mb	~~£80~~ £75
33MHz FPU inc. crystal	£15

Controllers

Free High Density Disk Drive with any Catweasel sold during January 1998

Catweasel for A1200 – allows you to connect High Density Disk Drive fits on to clock adapter leaving IDE interface free for our 4 way buffered interface	£59.00
Catweasel for A4000	£59.00
Buddha IDE Controller for A1500/2000/4000	£55.00
AT-Bus 2008 IDE controller	£69.00
Catweasel plus Buddha for A1500/2000/4000	£79.00
Oktagon 2008/4008 SCSI Controller	£99.00
Multiface III serial and parallel I/O card	£79.00

New GI-Quatro Buffered Interface for A1200

Buffered interface for A1200 with full IDEFIX'97 software allows you to connect 4 ATAPI devices to A1200 Comes with two 40 pin IDE cables and one 44 pin IDE cable ~~£59.95~~ £39.95

"Amiga Health Warning"
Fear not with our Buffered Interface

AlfaQuatro Interface

Specially made hardware and software. Allows 4 ATAPI devices, ie, 2 IDE hard disk & 2 IDE CD Rom to Amiga 4000 internal IDE controller ~~£59.00~~ £39.95

Joysticks & Joypads

Amiga Joysticks	**£9.95**
Amiga Joypads	**£9.95**
CD 32 Joypad	**£14.95**

Floppy Drives

External Floppy Drive for all Amigas	£39.95
Internal Floppy Drive A500/500+	~~£28.00~~ £25.00
Internal Floppy Drive A600/1200	~~£28.00~~ £25.00
Internal Floppy Drive A1500/2000	~~£35.00~~ £28.00
Internal Floppy Drive for Tower user with face plate	~~£35.00~~ £28.00

Winner of Gold Format Award in Amiga Format February 1997

Best pricing on CD ROM Drives & Hard Drives.

We can supply CD ROM solutions for ALL Amigas from A500 to A4000. Four top titles free: Nick Faldo's Championship Golf; Syndicate; Pinball Fantasies & The Chaos Engine.

All our External IDE CD ROM Drives have built in power supplies (they do not draw power from your Amiga)

GI-Quatro buffered interface allows you to connect 2.5" or 3.5" drives with full registered version software (not a demo)

All CD ROM drives have play CD facility.

	External A600/A1200	Internal A1500/A2000	External* A500/A500+	Internal A4000
Quad speed CD ROM for	~~£149.00~~ £129.00	~~£119.00~~ £99.00	~~£129.00~~ £109.00	~~£109.00~~ £89.00
Eight speed CD ROM for	~~£169.00~~ £149.00	~~£139.00~~ £109.00	~~£149.00~~ £129.00	~~£129.00~~ £109.00
16 Speed CD ROM for	~~£189.00~~ £169.00	~~£159.00~~ £119.00	N/A	~~£149.00~~ £129.00

*(for A500/A500+ Alfapower hard drive controller and Hard Drive is required). A1500/A2000 supplied with IDE controller & software. A4000 supplied with AlfaQuatro interface & Full IDEFIX software.

IDE Hard Drives for A1500/2000

Hard Drives plus Buddha IDE Controller 1.2 Gig	~~£189.00~~ **£159.00** ***Starbuy***
Hard Drives plus Buddha IDE Controller 2.1 Gig	~~£230.00~~ **£179.00** ***Starbuy***

IDE 2.5" Hard Drives for A600/1200

All 2.5" Hard drives come formatted and installed with Workbench, including IDE Cable, screws, software and instructions supplied. *(please check for availability)*

170Mb	~~£85~~ £69 *Starbuy*
250Mb	~~£89~~ £79
810Mb	~~£149~~ £129 *Starbuy*

Star Buy

IDE 3.5" Hard Drives for A1200/4000

850Mb	~~£129~~ £105	1.7Gig	~~£155~~ £129
1.2Gig	~~£135~~ £110	3.2Gig	~~£200~~ £179
2.1Gig	~~£175~~ £139	*5.0Gig	~~£329~~ £279
3.8Gig	~~£229~~ £199		

We will partition and format Hard drives and install Workbench. *5.0Gig will fit and work on Amiga Computers contrary to warnings given (Amiga Format Gold Award winner August 1997)

Memory

4Mb Simms	~~£20~~ £15	8Mb Simms	~~£30~~ £25
16Mb Simms	~~£65~~ £55	32Mb Simms	~~£145~~ £100

Zip Rams *(suitable for A3000, Alfapower, At-Bus 2008 & Oktagons)* every 2Mb £40.00

Accelerator for A1200

Viper MKV 1230 50MHz plus SCSI interface with 4Mb	£159.00
with 8Mb	£179.00
with 16Mb	£199.00
Viper MKIV 42MHz + 4Mb *(not upgradable)*	~~£80.00~~ £70.00

Accelerator for A600

Viper A630 40MHz + 4Mb *(not upgradable)*	£110.00
Viper A630 40MHz + 8Mb *(not upgradable)*	£120.00

Miscellaneous Products

Philips monitor to Amiga cable	£6.00
Printer cable	£5.00
PC Keyboard Adapter	£19.95
SCSI case with PSU	£49.00
Boot selector switch for A500/2000	£10.00
44pin 3 connector cable	£5.00
44pin 2 connector cable	£3.00
40pin 3 connector cable 90cm	£5.00
AlfaQuatro 3x40pin Interface & IDE cables	£39.95
DD floppy disks (50) *including multicoloured disk labels*	£13.00
DD floppy disks (100) *including multicoloured disk labels*	£25.00
3.5" Hard Drive Kit for A600/1200 *+ Install software*	£15.00
Diskbox to hold 10 discs	£1.00
Animal Jungle design and Dinosaur design	£2.00
2 in 1 Scanner/Mouse Pad *Can be used as a memo pad*	£3.00
Amiga Power Supply 4.5 amp	~~£29.95~~ £15.00
Plain Wristrest	£2.00
GI-Quatro buffered interface with cables but no software	£39.00
A500+ 1Mb ram card	£20.00
A600+ 1Mb ram card	£20.00
ROM Chip for A500 or A600 V2.05	£19.00

CDROM Drives (Bare) For internal fitting.
Requires interface and software

IDE 4speed	~~£49.00~~ £39.00
IDE 8speed	~~£59.00~~ £49.00
IDE 12speed	£79.00
IDE 16speed	~~£79.00~~ £69.00

Super value Software pack: DpaintIV + Digita Wordworth3 and Print manager + Dennis and Oscar Games	£15.00
Chaos pack AGA: 4 great games **(on disks)** (The Chaos Engine, Syndicate, Pinball Fantasies, and Nick Faldos Golf). All Amiga Format Gold winners	£5.00
Weird Science **3D Images** on CD	£5.00
Weird Science **1078 Weird Images** on CD	£5.00
LSD compendium volume 3 over 600mb of PD on CD	£5.00

Audio Cables for CD ROM's

Stereo jack (3.5mm) plug to 2 x RCA phono plugs 1.2 meter long	£5.00
Audio mixer 2 x RCA phono plugs to 2 x RCA phono plugs/sockets 1.8 meter long	£6.00
2x RCA phono plugs to 2x RCA phono plugs 1.2 meter long	£5.00

Multipass OCR Software suitable for all scanners and direct scanning support for hand scanners by Migraph, Golden Image, AlfaData and Power	~~£49.00~~ £10.00

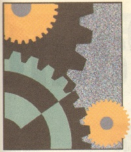
All prices include VAT. Please add £3.50 P&P for items under £30.00, £5.00 for items over £30.00, £8.00 P&P for Scanners, Speakers & Hard Drives, £10.00 courier for next day. Tax Free Export Orders Welcome.

Golden Image accepts Mastercard, Visa, Switch, Cheques & Postal Orders. E&OE. Prices subject to change without notice. Goods subject to availability. Specifications subject to change without notice.

Golden Image (UK) Ltd
Unit 65, Hallmark Trading Estate, Fourth Way, Wembley, Middx HA9 0LB
Sales Hotline No: 0181 900 9291 Fax: 0181 900 9281
http://www.reserve.co.uk/gold Talking Pages: 0800 600900
Our standard terms and conditions apply – available on request. We do not supply on a trial basis.

VISA
SWITCH
MasterCard
AMERICAN EXPRESS

Amiga Workshop



All your favourite tutorials are here once again, joined this month by PPaint 6.6 and a call for all Amiga user groups looking for new recruits (see page 95).

76 Personal Paint 6.6

Our lead graphics tutorial switches to Personal Paint 6.6 this month as we explore the power of its ARexx macros.

80 C Programming

Jason Hulance gets with the program and this month he takes a look at how to add an ARexx interface to your projects.

84 Surf's Up

Comms expert Neil Bothwick goes for a long dip in the Ocean of Information and splashes about for a while.

85 Surf of the Month

Neil Bothwick gives you an overview of the best of the best web-sites... *Party on Neil*.

86 Wired World

The man that CU Amiga just can't seem to get rid of, Mat Bettinson, continues his guide to setting up a web page.

88 Sound Lab

Dhomas Trenn plays with some of the better shareware audio packages that are available at the moment.

90 Desktop Publishing

In part 10 Larry Hickmott gives more handy DrawStudio Lite tips, with a view to designing web pages.

96 Q & A

Need assistance on Amiga related topics? Here our panel of Einsteins do their best to provide the answers.

107 A to Z

Amiga to Zorro, and just about everything in between. This time it's E's all round...

Personal Paint

Personal Paint 6.6 p76

get
CONNECTED
@
v2

Desk Top Publishing p90

Here's the nice transparent Amiga RC5 logo

The background is the same logo but converted to black and white with the contrast turned right down. The brush contains two logos set at diagonals so you get the nice staggered repeat.

Wired World p86

Regulars

83 Back Issues

Missed an issue? Shame on you! All is not lost though, as you can probably find the offending item right here.

100 Backchat

Comments, general information, criticism, suggestions. Here's a chance to get your name up there in print.

103 Subscriptions

Life is just great when you take out subscribtion to CU Amiga, the UK's best selling Amiga magazine. Oh, such halcyon days.

104 Points of View

With soap boxes underfoot, CU Amigas staff and contributors let the world know just what they think about stuff. Don't mess.

PART 1

Personal Paint

PPaint 6.6 has a few nice surprises hidden up its sleeve. In part one of our new tutorial series, John Kennedy examines one of its most powerful features...

As you'll know by know after trying our special coverdisk give-away, Personal Paint is the premier drawing and image processing program for the Amiga. It's compatible with almost everything – including high end graphics cards – and after many years of development, it provides dozens of tools which you simply won't find anywhere else.

One of its unique functions is the ability to make use of ARexx, and this can lead to some very impressive results.

What is ARexx?

ARexx is the Amiga's built in scripting and programming language. An ARexx program can be used for something routine like file maintenance (for example, renaming or moving files), but what makes it special – and the Amiga too – is the way ARexx can integrate itself with other programs.

Any program which is said to have an "ARexx port" makes available it's facilities to the ARexx programmer. Now an ARexx script can drive the program itself, instead of mouse movements and keyboard actions. ARexx can automate processes, or even link two or more programs together.

Personal Paint has a very extensive ARexx port, which makes a large number of commands available to ARexx programs. These commands appear in the ARexx program like new function calls, so they are very easy to implement.

Starting an ARexx program can be done from within Personal Paint, and this makes it easy to create your own "macro functions" which can be performed from within the program.

This makes it easy to process batch operations (such as converting a list of 100 images) or performing complicated actions with total accuracy: such as drawing text inside a circle.

Preparing for ARexx

Before you can execute an ARexx script, the utility which executes the ARexx program needs to be installed and running. There is every chance that this is already the case on your system, but if not you need to make sure that the RexxMast program is installed and that it is running. Most people include a line which says

```
run >nil: <nil: RexxMast
```

in their user-startup sequence so that it happens automatically every time the system boots up. Once started, RexxMast runs in the background waiting for an ARexx program to start. ARexx programs can be started using the "rx" command from the Shell, or from within an application.

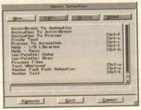
Personal Paint and ARexx

Personal Paint has a selection of previously written ARexx programs all ready and waiting for you to use them. These programs can be executed from within Personal Paint, so to get started, simply run PPaint in the usual way.

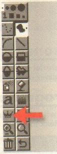
You'll notice on the toolbar an icon of a little crown. This is the ARexx execution button, and it means you can quickly use ARexx like any other Personal Paint tool. It works like this:

Left click: Run the currently selected ARexx script. If no script has been selected, then try bringing up the list.

Right click: Bring up the list of ARexx scripts and let the user pick one of them.


Macro Selection
New...
Edit...
Delete
About...
Anim-Brush To Animation
Animation To Anim-Brush
Animation To Frames
Circle Text
Frames To Animation
Help - I/O Libraries
Help - Rexx
Iso-Palette: Color
Iso-Palette: Gray
Process Files
Text Whirlpool
Vector Font Path Selection
Vector Text
Ctrl-f
Ctrl-c
Ctrl-r
Ctrl-1
Ctrl-h
Ctrl-w
Ctrl-v
Ctrl-t
Execute
Exit
Cancel

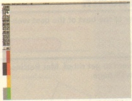
▲ The script selection tool opens when you right click on the ARexx toolbar icon.



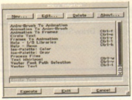
◀ The ARexx icon on the toolbar makes it quite easy to execute scripts from within Personal Paint.

Using the supplied scripts

Let's look at one of the supplied scripts. You'll see how easy to use, and how much an integrated part of Personal Paint it really is. Experiment with different circle and font sizes for the best effect. You can use different levels of anti-aliasing, which blurs the text slightly and makes rotated letters look much better: although a graphics mode with several similar colours gives best results.

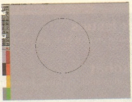


▲ Step 1. With a clear screen, right click on the ARexx icon in the toolbar.

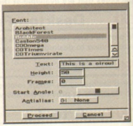

Macro Selection
New...
Edit...
Delete
About...
Anim-Brush To Animation
Animation To Anim-Brush
Animation To Frames
Circle Text
Frames To Animation
Help - I/O Libraries
Help - Rexx
Iso-Palette: Color
Iso-Palette: Gray
Process Files
Text Whirlpool
Vector Font Path Selection
Vector Text
Ctrl-f
Ctrl-c
Ctrl-r
Ctrl-1
Ctrl-h
Ctrl-w
Ctrl-v
Ctrl-t
Execute
Exit
Cancel

Circle Text

▲ Step2. When the list of scripts appears, select "Circle Text" and click on the "Execute" button.

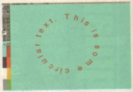


▲ Step3. The script list disappears, and it looks as though nothing is happening. However, Personal Paint is waiting for you to draw a circle. Click in the centre of the screen with the left mouse button, and with the button still held down, drag out the outline.


Font:
Architect
BlackForest
Bubble
Caslon540
CGOmega
CGTimes
CGTriumvirate
Start Angle:
Proceed
Cancel

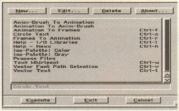
Text: This is a circul
Height: 50
Frames: 0
Antialias: None

▲ Step 4. When you release the button, the Settings window for the Circle Text tool will appear. Now you can select the font, the size and the message you want to appear. We'll come back to the other features later.


This is some circular text.

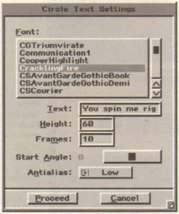
▲ Step 5. Once you've chosen the font and message, click on Proceed and then watch as the text appears on screen. Easy!

The Power of ARexx



```
Anim-Brush To Animation
Animation To Anim-Brush
Animation To Frames                 Ctrl-f
Circle Text                         Ctrl-c
Frames To Animation                 Ctrl-r
Help - I/O Libraries                Ctrl-l
Help - Rexx                         Ctrl-h
Iso-Palette: Color
Iso-Palette: Gray
Process Files
Text Whirlpool                      Ctrl-w
Vector Font Path Selection          Ctrl-v
Vector Text                         Ctrl-t
Circle Text
```

▲ **Step 1. Start again with a clear screen, and select the Circle Text ARexx script.**



Font:
CGTriumvirate
Communication1
CooperHighlight
CracklingFire
CSAvantGardeGothicBook
CSAvantGardeGothicDemi
CSCourier

Text: You spin me rig
Height: 60
Frames: 10
Start Angle: 0
Antialias: Low

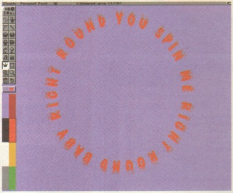
▲ **Step 2. This time alter the Frames setting to about 10. Make sure the text you are using ends with a space.**

Rotating text like that by hand would almost be impossible to do right, but ARexx has meant that we've performed the actions in a few seconds. However, there's still more which even this seemingly simple script can do.

This is exactly the kind of effect which the combination of ARexx and Personal Paint make so easy. Trying to achieve the same effect with any other paint program would take hours or even days, so make the most of it.

The more frames you use, the smoother the spinning effect – try fifty for a really smart title to put on your Web page or for using when titling videos.

You can check all the frames you have created by opening up the Storyboard window.



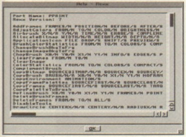
▲ **Finally, we can use Personal Paint to replay our new animation. Using different process filters can lead to some excellent images, so don't be afraid to experiment.**

The supplied scripts

As you will have seen when selecting the Circle Script, Personal Paint comes with a collection of scripts to get you started. You can get individual help on each script by clicking on the "About" button in the script list, but here's a brief summary.

Anim-Brush to Animation

The anim-brush structure is similar to an ordinary brush, but can store several images. It's useful when dealing with only small portions of the screen. This script takes the current anim-brush, and creates a unique frame for each image.



```
Port Name: PPRINT
Rexx Version: 7

AddFrames FRAMES/N POSITION/N BEFORE/S AFTER/S
AdjustColors FROM/N TO/N COLOR/N BRIGHTNESS/N
Airbrush X/N/A Y/N/A TIME/N/A ERASE/S COMPLEME
AllocateBitmap WIDTH/N/A HEIGHT/N/A DEPTH/N/A
ApplicationIcon FILE DROP/S SHIFT/S PREVIEW/S
BrushColorStatistics FROM/N TO/N COLORS/S COMP
ChangeBrushBkgToFrg
ChangeImageBkgToFrg
ChopBrush X0/N Y0/N X1/N Y1/N INFO/S EDGES/S P
ClearFrames FROM/N TO/N
ClearImage
ColorStatistics FROM/N TO/N COLORS/S COMPACT/S
ComplementBrush
CopyBitmap SOURCEBITMAP/N/A SOURCEX/N SOURCEY/
CopyBrush BRUSH/N/A X0/N Y0/N X1/N Y1/N NOFRAM
CopyEnvironment ANIMATION/S
CopyFramePalettes SOURCEFIRST/N/A SOURCELAST/N
CopyFrames SOURCEFIRST/N/A SOURCELAST/N/A TARG
CopyPaletteToBrush
DefineBrush X0/N Y0/N X1/N Y1/N FRAMES/N POINT
DeleteBrushFrames
DeleteFrames FROM/N TO/N ALL/S
DisableTools
DrawCircle CENTERX/N/A CENTERY/N/A RADIUSX/N R
```

Animation to Anim-Brush

This script processes the current animation, all frames, and snapshots the screen in each case to make a new anim-brush. This brush can then be saved and used in subsequent projects.

Animation to Frames

As you know, an animation is contained in a single file but consists of separate images. This script converts the ANIM file into a group of frames, such as frame000, frame001 and so on. It's useful for splitting up an animation for further processing (for example, blurring).

Frames to Animation

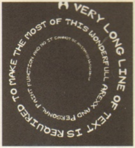
The opposite to the above script, this is a very powerful function. It takes a list of individual images and converts them into a single ANIM file. This is a great way to take frames created by rendering programs and convert them into a animation file for playback.

Help files

As the name suggestions, these scripts bring up pages of help. The ARexx help is particularly helpful, as it lists all the ARexx commands which are available. Essential when writing your own scripts.

Palette Scripts

These scripts adjust the current pen colours to create a graduated effect. Easier and quicker than the palette tool.


A VERY LONG LINE OF TEXT IS REQUIRED TO MAKE THE MOST OF THIS WONDERFULL AREXX AND PERSONAL PAINT FUNCTION AND NO IT CANNOT BE ANIMATED

Process Files

This is a very, very powerful script. First you select a process from the standard list, then you select a directory. All the images in the directory have the process applied and are then re-saved.

This allows you to set up a batch process to deal with the frames from a rendering project for example. The frames can be created from an ANIM and converted back into the ANIM using the other scripts described here.

Text Whirlpool

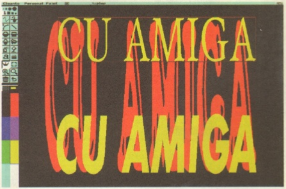
This works in a similar way to the Circle Text script, but creates a spiral of text getting smaller and smaller as it twists into the screen. A nice effect, if you can find a use for it!

Vector Font Path Selection

Allows you to select the directory where any Compugraphic fonts are stored. These are the vector fonts which scale properly and without "jaggies". Any suitable fonts on your system will end with the ".otag" extension.

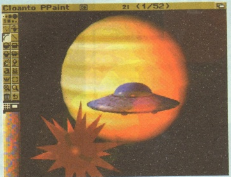
Vector Text

This script will render the vector text in a box which you can drag out. This makes it possible to get a perfect size and fit for any text you need rendered, with no "jaggies".

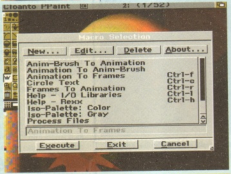


Processing an animation

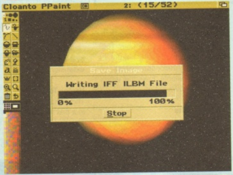
Here's how to apply a process effect to an entire animation. In this case, the fifty frame animation will be given an edge detection process. To make it easier to keep track of all the files, the ANIM file is placed into a new directory on the hard drive.


Cloanto PPaint
2: (1/52)

1 First load the animation into PPaint. This is a 256 colour animation created in Imagine (50 frames in a single ANIM file).

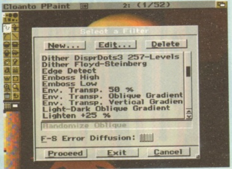

Cloanto PPaint
2: (1/52)
Macro Selection
New...
Edit...
Delete
About...
Anim-Brush To Animation
Animation To Anim-Brush
Animation To Frames Ctrl-f
Circle Text Ctrl-c
Frames To Animation Ctrl-r
Help - I/O Libraries Ctrl-l
Help - Rexx Ctrl-h
Iso-Palette: Color
Iso-Palette: Gray
Process Files
Animation To Frames
Execute
Exit
Cancel

2 In order to process each frame of the animation, we need the individual images which make it up. We open up the ARexx script "Animation to Frames".

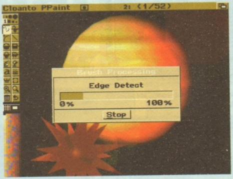

Cloanto PPaint
2: (15/52)
Save Image
0%
100%
Stop

Writing IFF ILBM File

3 We then wait as the separate frames are written, one by one, to the hard drive. They will be given numbered names.

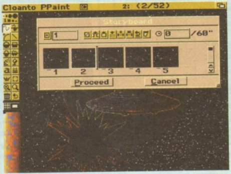

Cloanto PPaint
2: (1/52)
Select a Filter
New...
Edit...
Delete
Dither DisprDots3 257-Levels
Dither Floyd-Steinberg
Edge Detect
Emboss High
Emboss Low
Env. Transp. 50 %
Env. Transp. Oblique Gradient
Env. Transp. Vertical Gradien
Light-Dark Oblique Gradient
Lighten +25 %
Randomize Oblique
F-S Error Diffusion:
Proceed
Exit
Cancel

4 Next we use the script "Process Files", and supply the directory which contains all the newly created frames. Then we select the process we are going to apply.

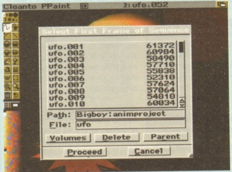

Cloanto PPaint
2: (1/52)
Brush Processing
0%
100%
Stop

Edge Detect

5 Now the process filter is applied to each frame in turn. For really long animations, this might be an overnight job.


Cloanto PPaint
2: (2/52)
Storyboard
1
0
/60"
1
2
3
4
5
Proceed
Cancel

6 Now we can re-combine the frames into a single animation using the script "Frames to Animation". This creates a single ANIM file for saving.

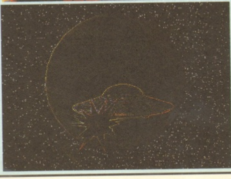

Cloanto PPaint
2:ufo.052
Select First Frame of Sequence
Volumes
Delete
Parent
Proceed
Cancel

```
ufo.001             61372
ufo.002             60984
ufo.003             58490
ufo.004             57710
ufo.005             55838
ufo.006             52310
ufo.007             57624
ufo.008             57064
ufo.009             54818
ufo.010             60034
```

Path: Bigboy:animproject

File: ufo

7 You can see the individual frames which make up the animation by using the Storyboard window.



8 Finally, Personal Paint can replay our new animation. Different process filters can lead to some excellent images.

White Knight Technology

AMIGA & Desktop Video Specialists
FREEPOST ANG6387, WARE, HERTS, SG11 1YA

Phone
01920
822 321
9.30 - 5.30
Mon - Fri

Fax 01920
822 302

Email
White_Knight_Tech
@CompuServe.Com

Next Day Delivery From Just £ 5.00

WE ACCEPT
Mastercard
Visa, Delta
and Switch
2.5% Surcharge
on Credit cards,
Not Switch / Delta

All Prices Include VAT @ 17.5%

UK Authorised Distributor For PHASE 5 DIGITAL PRODUCTS

BLIZZARD Accelerator Series
phase 5 DIGITAL PRODUCTS
CYBERSTORM PPC
CYBERVISION PPC
BLIZZARD 603e+ Power Board
CYBERVISION64/3D
CYBERSTORM MK III
POWER UP AMIGA™ GOES POWER PC™

68k Series Accelerators

For A3000 / A4000

CYBERSTORM MK III

CYBERSTORM MK3 NEW	
060 50Mhz, with Ultra-Wide SCSI-3 January Sale - 8Mb FREE	£ 495

For A1200 Only

BLIZZARD 1260 Turbo Board
BLIZZARD 1230-IV Turbo Board

BLIZZARD 1260 & 1230-IV

Lower Prices

68060, 50MHz	£ 309
68030, 50MHz	£ 93
SCSI Controller	£ 63

PowerPC Accelerators

For A1500 & A2000

BLIZZARD 2604e Power Board

Expected Release Date 02/98
Onboard Ultra-Wide SCSI-3,
Socket For Cybervision PPC

180MHz PPC 604e & SCSI-3

January Sale = FREE RAM
8 Mb FREE with 040/25 Version
16 Mb FREE with 060/50 Version

with 68060, 50MHz	£ 789
with 68040, 25MHz	£ 599

200MHz PPC 604e & SCSI-3

January Sale = FREE RAM
16 Mb FREE with 040/25 Version
32 Mb FREE with 060/50 Version

with 68060, 50MHz	£ 889
with 68040, 25MHz	£ 699

Also available without 040/060 and as an upgrade for Blizzard 2040 / 2060 owners from only £ 525. Call us for more details.

CYBERVISION PPC

No date or price available - Call

CYBERVISION64/3D

24-Bit Graphics Card

CYBERVISION 64/3D	£ 145
CV 64/3D Scandoubler	£ 63

PowerPC Accelerators

White Knight
POWER UP
AMIGA™ GOES POWER PC™
Supplier Of Choice for The Most Discerning Customer

CYBERSTORM PPC

For A3000/T & A4000/T

Onboard Ultra-Wide SCSI-3,
Socket For Cybervision PPC

180MHz PPC 604e & SCSI-3

January Sale = FREE RAM
8 Mb FREE with 040/25 Version
16 Mb FREE with 060/50 Version

with 68060, 50MHz	£ 765
with 68040, 25MHz	£ 575
No 68k Series CPU	£ 499

200MHz PPC 604e & SCSI-3

January Sale = FREE RAM
16 Mb FREE with 040/25 Version
32 Mb FREE with 060/50 Version

with 68060, 50MHz	£ 865
with 68040, 25MHz	£ 675
No 68k Series CPU	£ 599

If you own a Cyberstorm Mk1 or Mk2, please call for special upgrade prices.

BLIZZARD 603e+ Power Board
BLIZZARD 603e Power Board

For A1200 Only

Upgrade available from Blizzard 1230/40/60

January Sale = FREE RAM
8 Mb with all 040/25 Versions
16 Mb with all 060/50 Versions

Blizzard 603e / e+ Power Board

With Built-in Fast SCSI-2 Interface

160Mhz without 68K	£ 285
160Mhz with 030/50	£ 325
160Mhz with 040/25	£ 330
160Mhz with 060/50	£ 515
200Mhz without 68K	£ 375
200Mhz with 030/50	£ 415
200Mhz with 040/25	£ 420
200Mhz with 060/50	£ 605
250Mhz without 68K	£ 445
250Mhz with 030/50	£ 485
250Mhz with 040/25	£ 490
250Mhz with 060/50	£ 675

SCSI Hard Drives

3.5" Bare, ULTRA SCSI-3

ULTRA SCSI-3 is Compatible with SCSI-1 & 2

2.1Gb IBM Capricorn	(5400)	£ 190
4.3Gb IBM Capricorn	(5400)	£ 280
4.5Gb Seagate 34555	(7200)	£ 295
4.5Gb Seagate 34555	(Wide)	£ 310
4.5Gb Seagate Barracuda		£ 485

Ultra-Wide Capricorn drives - Same Price

IDE Hard Drives

3.5" Bare, For A4000

These drives are NOT suitable for Internal Fitting In An AMIGA 1200 or AMIGA 600
They can be used in A1200 Tower systems fitted with a properly buffered IDE Interface

Lower Prices

1.6Gb IDE	£ 155
2.1Gb IDE	£ 160
2.5Gb IDE	£ 165
3.5Gb IDE	£ 185
4.0Gb IDE	£ 220

IDE Hard Drives

2.5" Bare, For A1200

1.4Gb IDE	£ 169
1.8Gb IDE	£ 189
Cable, S/W & Screws	£ 10

Only when purchasing a drive !!

CDROM Drives (Bare)

Internal Fitting - NOT for A1200

12 x Speed SCSI-2	£ 109
SCSI-2 CD Writers	From £ 299

ATAPI/IDE CDROM's can be used in A1200 Tower systems with a buffered IDE Interface

16 x Speed ATAPI/IDE	£ 75
24 x Speed ATAPI/IDE	£ 85

Cartridge Drives (SCSI)

SyJet 1.5Gb Ext. + Cable	£ 375
SyJet 1.5Gb Int. + Cable	£ 285
SyJet 1.5Gb Cartridges **(x 3)**	£ 245
ZIP 100Mb Ext. + Cable & Term	£ 135
ZIP 100Mb **NEW** Internal	£ 135
ZIP 100Mb Disks (x 6)	£ 75
JAZ 1Gb Ext. + Cable & Term	£ 375
JAZ 1Gb Internal 3.5" version	£ 285
JAZ Disks (x 3)	£ 245
EZ Flyer 230Mb Ext. + Cable	£ 145
EZ Flyer 230Mb Disks **(x3)**	£ 70

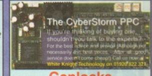
ALL DRIVES SUPPLIED WITH ONE DISK

Networking

HYDRA Zorro Ethernet	£ 159
A1200 PCMCIA Ethernet	£ 129

Memory SIMMS

8Mb, 72 pin, 60ns	£ 20
16Mb, 72 pin, 60ns	£ 40
32Mb, 72 pin, 60ns	£ 80



The CyberStorm PPC
If you're thinking of buying one, shouldn't you talk to the experts?
For the best advice and service (Although not necessarily the best prices - After all, good service doesn't come cheap!) Call us now at
White Knight Technology on 01920 822 321

Genlocks

LOLA 2000 SVHS & VHS	£ 349
LOLA 1500 VHS Only	£ 179

Lower Prices

SIRIUS SVHS & VHS Plus Audio & Chroma Key. Software control.	£ 599
NEPTUN As Sirius, but without audio, RGB & Chroma Keyer.	£ 449

AMIGA 4000T

With 040/25, 6Mb, NO HD
£ 1,179
Without CPU, 6Mb, NO HD
£ 1,049
Add Cyberstorm PPC, Drive & RAM
Configured FREE - If Required

Monitors

17" Microvitec M/sync LAST FEW	
For all screen modes	£ 425
17" Hi-Res SVGA	£ 379
15" Hi-Res SVGA	£ 199
14" Hi-Res SVGA	£ 165
14" 1084S *Refurbished*	
PAL, with stereo sound	£ 159

Amiga Software

ART EFFECT 2	£ 149
AMIBACK 2 Backup S/W	£ 25
MULTIMEDIA EXPERIENCE	£ 40
TURBOCALC 3.5 S/sheet	£ 25
INFONEXUS 2 File Manager	£ 15
WORDWORTH V5	£ 20
CLARISSA Professional V3	£ 159
ADORAGE V2.5	£ 89
MONUMENT DESIGNER V3	£ 219
MONUMENT CREATIVE CD	£ 59
ANIMAGE V1	£ 89
ADORAGE MAGIC Movieshop	£ 69
ADORAGE MAGIC Casablanca	£ 59

Specifications ?
If you need technical details on any of our products, call us on 01920 822 321 weekdays.
White Knight Technology are renown for excellent product knowledge, service & honesty.
We Are Still Supporting The *AMIGA* !

Please Call To Verify Price & Availablility before sending an order.
Minimum Order Value £ 50 + P&P
Many prices subject to exchange rate
E & O E - 12/12/97

Amiga C Programming

PART

7

... ARexx, ARexx, a Kingdom for ARexx...

This month we're going to look at adding an ARexx interface to our program. This will enable the user to utilise the full power of ARexx to control the drawing (or whatever aspects of the program we make available through the interface).

To enable ARexx to communicate with our program, basically all that needs to be done is to create a public message port. We've already worked with ports, because this is the way Intuition communicates about user activity (through IDCMP).

The significant difference is that the message port we need to create is public. This means that other programs (in particular, the ARexx system) can see the port and send messages to it. In contrast, the port attached to a window is private, so only Intuition can send messages to it.

Once we have our port, all we then need to do is accept and understand the messages that arrive on it. This will involve making some small changes to the message handling code (in "idcmp.c"). The final topic of interest here is the interpretation of the messages from ARexx.

Libery Library

A C library of functions in a ".lib" file, much like the Amiga (shared) libraries we've met before. The difference is that the code for any functions used from a C library is added to your program in the final stages of compilation (ie; when linking), so each program that uses the function has its own copy. On the other hand, there is only ever one copy of code for functions in an Amiga (".library") library, and this is shared between all programs that want to use it.

AmigaLib (ie; the "amiga.lib" file) is the most commonly used C library that you'll actually come across. Intuition (ie; "intuition.library") is an example of an Amiga (shared) library.

Port Creation

First things first: we need to create a public message port. This can be done fairly easily using the "CreatePort()" function from the AmigaLib linker library. However, we need to make a public port and to achieve this we must give the port a name.

But we don't want to just blindly add a new named port: if a port with our name already exists then our program cannot just continue. In a more thorough program we might deal with this problem by trying a different succession of different names (by appending ".n", where n is a number), but for this example we'll just fail the whole program if we can't make a new port with the desired name.

A naive solution to this problem is shown in Example 1. There are two reasons why this code isn't ideal. The first is a problem that's caused by one of the Amiga's biggest strengths: multitasking.

Our program may be running at the same time as many other programs, and any one of those might want to create a port of the same name as our program. "FindPort()" merely returns the named port if it can be found at that point in time.

It does not reserve the name if it wasn't found, so another program could easily sneak in and use the name before our program gets to the "CreatePort()" call. What we need is a way in which to prevent this and make our creation 'atomic'.

If you're really alert you've probably just popped back after reading the description of 'atomic', nearby. So, you're probably expecting that we'll use a semaphore to make our creation code atomic. Unfortunately, this is one of those cases where we don't

Example 1

```
/* Make sure the named port doesn't already exist */
if(FindPort(portname) == NULL)
{
 /* Now try making the port */ if(arexxport =
CreatePort(portname, 0))
{
  /* Succeeded */
 }
}
```

Example 2

```
2int createARexxPort(char* portname)
{
 int success = FALSE;
char* error = NULL;
/* First, must turn off multi-tasking so we can
atomicly add our port */ Forbid();
/* We can only succeed if the named port doesn't
already exist */ if(FindPort(portname) == NULL)
{
  /* At last, make the port (priority 1 to enable fast
searching) */  if(arexxport = CreatePort(portname, 1))
   success = TRUE;
 else
  error = "Error: cannot create ARexx port\n";
}
else
 error = "Error: cannot create ARexx port
(the name already exists)\n";
/* We must now turn multi-tasking back on... */
Permit();
/* .now we can print any error and return the result */
if(error)
  printf(error);
return success;
}
```

Example 3

```
struct RexxMsg* getARexxMsg()
{
 return (struct RexxMsg*)GetMsg(arexxport);
}
```

Example 4

```
void replyARexxMsg(struct RexxMsg* msg, LONG rc, char*
result)
{
 /* Set up reply result values */
msg->rm_Result1 = rc;
msg->rm_Result2 = NULL;
/* If the reply expects a result string, create one */
if((msg->rm_Action & RXFF_RESULT) && rc == 0 && result
!= NULL)
  msg->rm_Result2 = (LONG)CreateArgstring(result,
strlen(result));
/* Now we can reply to the message
*/ ReplyMsg((struct Message*)msg);}
```

Example 5

```
void freeARexxPort()
{
 if(arexxport)
 {
  struct RexxMsg* msg;
  /* First, make the port private so we get no more
messages */
  RemPort(arexxport);
  /* Now clear out any outstanding messages... */
  /* (Passing 20 for rc indicates an error reply) */
  while(msg = getARexxMsg())
   replyARexxMsg(msg, 20, NULL);
  /*
 ...and now it's safe to delete the port */
  DeletePort(arexxport);
  arexxport = NULL;
  }
 }
```

have that luxury. Instead, we must use the alternative of turning off multi-tasking momentarily.

To do this we use the "Forbid()" and "Permit()" functions to bracket our critical code (see Example 2). This way, no other program can do anything in between the calls to "FindPort()" and "CreatePort()", let alone create a port.

Unfortunately, the use of "Forbid()" adds another complication: it's illegal to try to do I/O (ie; use any DOS library function) when in the "Forbid()" state.

This means that we can't print messages to the console using "printf()", since that actually involves file I/O. So, we remember any error string in the "error" variable and print this only after the "Permit()".

This is a very picky technical point, but one that even seasoned Amiga programmers can fall foul of, especially when doing debugging: adding "printf()" statements can help you debug your programs, but if you add one to a section of code between "Forbid()" and "Permit()" then you'll be causing much worse problems than you're trying to fix!

The second problem with Example 1 is fixed in Example 2, too. It's a fairly minor point, but the change is to make the new port be created at a priority of one rather than zero. This is because ordinary (non-public) ports are created at priority zero.

There's usually a lot of them and it's only the creating program that's interested in them. Our public port will be searched for by ARexx, so we should make it's job as easy as possible.

Using a priority of one means that ARexx will find our port before it even looks at all the priority zero ports.

ARexx Messages

The first example (in the directory "arexx0") defines our ARexx port functions in the file "arexx.c". ARexx requires that we give some special interpretation to the messages it sends, so to help with this we've defined the functions "getARexxMsg()" (see Example 3) and "replyARexxMsg()" (see Example 4).

Example 6

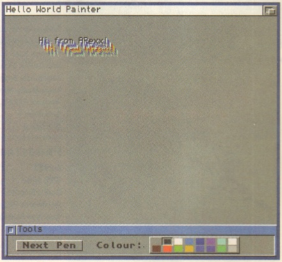
```
/* Process an ARexx message
*/static int doARexx(struct RexxMsg* msg)
{
 int going = TRUE;
 /* By default, our reply will indicate an error */
 LONG rc = 20;
 char* result = NULL;
 if(strcmp(msg->rm_Args[0], "QUIT") == 0)
 {
  going = FALSE;
  /* We recognised the command, so set rc to zero */
  rc = 0;  result = "Hello Painter is quitting";
 }
 replyARexxMsg(msg, rc, result);
 return going;
}
```

The only thing we need to do with a received message is be honest about its real type: an ARexx message isn't a simple "struct Message", it's a "struct RexxMsg". Our "getARexxMsg()" performs this type conversion by using a cast on the result of "GetMsg()".

Replying to an ARexx message is much more complicated. There are two cases to consider: we understood the message and acted on it successfully, or we didn't.

Within the former case there's a further subtlety: ARexx may have requested a result string (which can be used to help the user know what the message did in your program). This result string is not obligatory, but strongly recommended.

So, the function "replyARexxMsg()" also takes a result code and a result string. These will form the "rm_Result1" and "rm_Result2" fields of the message being returned, with the caveat that the result string must only be supplied if the message requested it (via the "RXFF_RESULT" flag) and the program acted on the message suc-



▲ Here's one I made earlier...

cessfully (ie; the return code is zero).

The last subtlety is that the result string must be supplied as an ARexx 'argstring', and so "CreateArgstring()" is used to convert it.

The remaining part of "arexx.c" is the function "freeARexxPort()", which deallocates the ARexx port we created. This must also ensure that any pending messages are replied to properly (ie; the port should be flushed using "replyARexxMsg()").

To remove the possibility that any more messages can arrive whilst you are doing this, the ARexx port is first removed from the system's list of public ports (using the "RemPort()" function). Once all the messages have been replied to, the port can safely be deallocated by using "DeletePort()".

Acting on Messages

The framework we've created is used in "main.c" (setting up and destroying the port) and "idcmp.c" (handling the messages). The handling code is pretty straight-forward: it's just another port to listen to. The interesting code is the "doARexx()" function (see Example 6).

An ARexx message we receive corresponds to an ARexx command, and this is stored in the first argument string in the message ("rm_Args[0]"). We can use the standard C function "strcmp()" to compare this against the commands we want to accept.

In the first example (in the "arexx0" directory), the only command we allow is "QUIT" (see Example 6).

If we get this message we reply with a return code of zero and a suitable return string, and then quit the program in the normal way (ie; stop the main message loop by setting "going" to "FALSE").

The second example (in the directory "arexx1") builds on this and allows a couple more commands ("PEN" and "DRAW").

Of most interest is the use made of the standard C function "sscanf()" to parse the more complicated command strings. "sscanf()" is an extremely powerful function, which we'll look at in the future.

For the time being, you need to boot up your "RexxMast", run the second example and then type "rx test.rexx" in Shell window (see Example 7 for a listing of the second example's "test.rexx").

Have fun!

Jason Hulance

Example 7

```
/* Test Arexx communications */
options results
address hellopainter
do i = 15 to 1 by -1
 pen i
 draw 40+i 40+i "Hi from ARexx!"
end
```

Atomic code

A piece of code is atomic if it is guaranteed to be executed in one lump, without any other programs interfering. In a multi-tasking environment it is critical that certain sections of code are atomic. A simple example is the creation of a new file: if two programs both want to create the same file then at most one of them should succeed (it would be a big problem if both of them succeeded!).

So, the code that decides that a file does not already exist and then makes a new file needs to be atomic, at least from the point of view of any program that wants to create files.

Atomicity is usually assured via a generic mechanism of 'semaphores', or by temporarily turning off multi-tasking. These days on the Amiga, the latter approach is frowned upon, although it's sometimes the only way to do things. If you can use a semaphore (or some other locking mechanism) then that is greatly preferable. (This is a big topic that we'll return to in the future.)

Support Amiga Software Now!!!

RING US TODAY
01908 370 230

DrawStudio 2
upgrades from £29.95 (floppy disk)
compact disk version £39.95

OTHER PRODUCTS
ProPage Manual £14.99
ProPage Book £14.99
ProPage Book Bundle £24.99
ProPage Book CD Bundle ...£29.99
DrawStudio Book/CD £16.99
DrawStudio Book/Floppy £13.99
ImageStudio Manual £5.99
Personal Paint 7.1 ....£29.95
TurboPrint 6 ....£ call
DiskSalv 4 ....£19.99

PAGESTREAM EXTRAS
TextFX2 ....£29.95
JPEG Filter £14.99
Gary's Effects £14.99
Wordworth Filter £14.99
True Type Font Engine £14.99
Borders Vol 1 ....£25.00
Borders Vol 2 ....£25.00

Buy PageStream 3 from LH Publishing and get £5 off each of the filters!!!

PageStream dtp 3
Version 3.3 Now Shipping
BUY IT today £125

We accept most major credit cards including VISA, MASTERCARD, EUROCARD, SWITCH
Make Cheques/Postal Orders payable to LH Publishing, UK Postage - £3, Europe - £5, Rest - £8
24 hour Fax Order Line: + 44 (0) 1908 640 371
...award winning software for the amiga

LH publishin

Back Issues

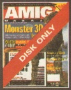
Looking for a specific Amiga article, game review, program, feature, tutorial, or even news story? Your search could well be over...

LIMITED STOCK!

OCTOBER 1996
Disks: Upper Disk Tools: ideal for sorting out those awkward disks and drives!
Features: The Amiga in America, Net software...
Inside: The speed issue, or something. Three top accelerators, a TCP/IP stack comparison & Capital Punishment

NOVEMBER 1996
Disks: XCAD 2000 - The premier 3D CAD package, plus Chaos Engine 2. CD-ROM or floppy edition
Features: Palmtop Amiga-Psion link-up
Inside: Opus 5.5, Delfina DSP sound card, Web Browser War, Alfa Quatro, CD-ROM writer

DECEMBER 1996
Disks: Wordworth 3.1 SE, Worms demo. CD-ROM or floppy edition
Features: CD-ROM drive for £50! Amiga and PC games on CD-ROM
Inside: Draw Studio, Apollo 1230, Storm C, Siamese RTG system, Tiny Troops



JANUARY 1997
Disks: CD-ROM or floppy edition, Imagine 4.0, Underwater Capers, plus over 100Mb of Imagine extras on CD
Features: Get a job in graphics, plus Imagine 4.0
Inside: Art Effect, PPaint 7, SWOS 96-97, Fighting Spirit, Chaos Engine 2 ...

LIMITED STOCK!

FEBRUARY 1997
Disks: Design Works, Minskies Furballs plus Worms – the Director's Cut extras and Imagine extras on the CD.
Features: The new A/Box
Inside: Wordworth 6 Office, Turbo Calc, Minskies Furballs, Bograts reviewed.

MARCH 1997
Disks: OctaMED SoundStudio (full program) Chaos Engine 2, Chaos Engine 2 AGA demo
Features: Turn your Amiga into a pro studio. Printers: problems solved.
Inside: Quickcam, Cybervision 3D, SMD 100, JetPilot reviewed

APRIL 1997
Disks: Directory Opus 5.11 (full program). Tiny Troops demo
Features: Build your own Tower Amiga Part 1. The 50 best Amiga Games
Inside: Massive Cinema 4D 3.0 Review, new DTP series, ProGrab Sampler, Teletext Decoder

MAY 1997
Disks: Image Studio (full program) Kargon RPG, exclusive clipart on CD
Features: The Future's Bright: Gateway buys Amiga! Tower Amiga Part 2.
Inside: PageStream 3.2, Big Red Adventure, LightWave 5, Epson Stylus 600…

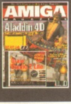
JUNE 1997
Disks: Pro Page 4.1 (full program) MPEGA 2.4, Sysinspector, The Sun game & more!
Features: CD-R for Amiga – cut your own CDs for a few hundred pounds plus Tower Amiga Part 3: Zorro.
Inside: Turbo Print 5, Net Connect, Cybervision…

JULY 1997
Disks: Free Net software, Quarterback 6.1 inc QB tools, Big Red Adventure
Features: Total Internet Solution, the history of the Amiga & a look at Amiga artist, Eric Schwartz.
Inside: Final Writer '97, Siamese RTG 2.0, Burn It…

AUGUST 1997
Disks: Dogfight, Turbo Print 5 Lite, Storm C Compiler
Features: Power PC is coming, Crack the Code, plus Power Gaming
Inside: Cinema 4D, Voyager NG 2.90, IBrowse 1.12 & Tower add-ons…

SEPTEMBER 1997
Disks: Sixth Sense Investigations, Vista Pro, MakePath, GeoMorph
Features: New Faces of Amiga Gaming, Amiga: The Next Generation, DIY Sound Card
Inside: Art Affect 2, Art Studio 2.5, Micronik genlocks, Flying High

OCTOBER 1997
Disks: TFX, TB 303 Emulator, Virus Z, Video Easel, Visual Prefs
Features: TFX: Quickstart Guide/Techniques & Tips etc., Suzanne: The Portable Amiga
Inside: Fusion Mac Emulator, Civilization, Mk II EZ Tower, Storm C



NOVEMBER 1997
Disks: Draw Studio 2 Lite, AIR Link Software
Features: D.I.Y. AIR Link, Aladdin 4D V5.0, Hydra A1200 Ethernet, Sensible Golf
Inside: Epson Stylus Photo, OxyPatcher, More TFX Tips, Visual IFX, Envoy 2.0,

DECEMBER 1997
Disks: PC Task 3.1, Dir Work 2.1, Workbench enhancements; icons, backdrops etc.
Features: Myst, PowerUP: First look, ISDN: The Net on speed.
Inside: Imaginex, HiSoft Squirrel CD-R, Sharp MD-MS200 Minidisc

JANUARY 1998
Disks: PPaint 6.6, Trapped 3 Demo, Sound Samples. CD Demos; Sound Probe, Foundation,
Features: 1997 Review, Workbench 2000, Remixing with the Pros
Inside: Cyberstorm PPc, Picture Manager Pro, Appollo 630, Uropa 2

Priority Order Form

Complete this form and send it with your payment to: CU Amiga Magazine Back Issues, Tower Publishing, Tower House, Sovereign Park, Lathkill St, Market Harborough, Leics. LE16 1EF. Tel: 01858 435 350.

Please rush me the following issues of CU Amiga Magazine

Issue date & type (CD or disk)	Quantity	Price
	Total price:	

Please allow 28 days for fulfilment upon receipt of request. All orders subject to availability.

☎ 01858 435 350

*Rates: UK: £5.99 Europe and rest of world: £6.50. Except for CD-ROM editions: UK £6.99 Europe and rest of world: £7.50. All prices include postage and packing. Disks/CDs are included with all orders. CD edition is available for the April 1996 issue, and monthly starting from the November 1996 issue.

Method of payment

☐ Visa ☐ Amex ☐ Access ☐ Diners Club card ☐ Cheque (£ Sterling)

Card no .... Expiry date ....

Signature .... Date ....

Please make cheques payable to EMAP Images Ltd.

Title .... Initials .... Surname ....

Address ....

....

.... Postcode ....

Daytime telephone number (including STD code) ....

Surf's Up!

That Net-bloke Neil Bothwick gives you the lowdown on another cluster of Internet sites which are well worth visiting...

JavaScript... when?

There's not been much new Internet software released recently, but that doesn't mean that nothing is happening. The only browser release has been an update for Voyager (2.92v) yet the authors of all three browsers, are working on major updates. The first couple of months of 1998 should be very interesting, with JavaScript capable versions of the big three due.

JavaScript is more important for Amiga users than Java, once at least one Amiga browser can handle it we can expect JavaScript to appear in many Amiga users' home pages. You can expect a JavaScript tutorial as soon as we have a browser capable of handling it.

So, which browser will be first and, more importantly, which browser will do it best? One difficulty facing all of the browser programmers is that Microsoft and Netscape have decided it is a good idea to make their versions of JavaScript incompatible with each other, we'll just have to wait and see how the Amiga browsers deal with this.

VoyagerNG

Socks for all

Last month's Surf's Up reported the release of a beta of Miami 3, one of the new features is SOCKS support. Now a SOCKS client has been released for AmiTCP. The current version is on this month's CD, or available from: **ftp://ftp.aminet.org/pub/aminet/comm/tcp/socksproxy.lha**

Non-Wintel news

If you want to know what's happening in the wider computing world, you usually find the news is dominated by Intel/Microsoft announcements. Convergence International is an organisation dedicated to support usage and development of all non-Wintel platforms.

Convergence

They state "We believe that if a time comes when one single platform is the only one in use the computer industry will suffer. Without competition there is stagnation, and no one platform can hope to be best suited to every application. While there are alternatives development is spurred on by competition, and people are free to choose the platform which best suits their needs."

Their web site at: **http://www.convergence.eu.org/** contains important news on developments on a wide range of non-Wintel platforms, including Acorn, Amiga, Apple, ARM, Be, Psion.

Golden Emerod demo released

IRC bots are another of those "necessary evils" brought about by those strange people who get their kicks from spoiling others fun. Although they can provide many useful functions to users, one of the main reasons for a installing channel bot is to prevent channel takeovers and other such antisocial behaviour.

Golden Emerod is such a program, and a demo version has recently been released. The latest version should be available from **http://www.wordbench.com/dfd/emerod.html**

Amiga RC5 team keeps making headlines

The Amiga Team RC5 effort is continuing well. They are now working on the attempt to crack a 64 bit key, and processed the first million blocks in only 35 days, the sixth team to do so.

Whether the key is cracked by an Amiga or not, the fact that the Amiga name appears in the top ten rankings can only be good publicity.

AWeb

You don't need to be using only Amiga to use join the Amiga team, and the new client works with machines that aren't connected to the Internet.

So it's now feasible to join from a networked computer and work and take blocks of keys home on a floppy disk for processing on your Amiga. A PowerPC client is in testing, currently processing over 500,000 keys per second, that's five times the speed of a 68060/50, and you should be able to run the 68k program on the 68060 chip of a CyberPPC card at the same time. See **http://homepage.cistron.nl/~ttavoly/rc5/** for full details. ■

Neil Bothwick

IBrowse

Net God speaks

Usenet is approaching meltdown. The amount of traffic is far in excess of what the original concept expected, or even what it was a few years ago.

UK ISPs are regularly handling over 9-10GB of messages each day, with US ISPs handling up to 11GB. Ask anyone what the biggest problem is with Usenet and they will probably answer with one word, "Spam".

Spam, mass postings of irrelevant information, usually get rich quick scams or equally undesirable things, is certainly a burden on the system, but the reaction to it is even more so.

There are now numerous "cancelbots", computers that scan for offending messages and automatically send out cancel messages, so for each spam message there are many more cancel messages, to the extent that up to 25% of the total usenet messages in a day can be cancel messages.

Add to this the interminable threads on spam, the replies to spam messages, often quoting the whole of the original message and you can see why the reaction to spam is causing far more problems than the spam itself.

Surf of the Month

The man Neil Bothwick takes some precious time out from compiling our CD to cruise the Worldwide Web, here's the results...

There's a lot of web sites that have been created by Amiga users, giving lie to the tale that you need a PC or Mac to do anything worthwhile on the WWW.

Two sites have been set up to highlight the impact of the Amiga in this area, and to show just what has been done with an Amiga, some software and that most important ingredient of web page creation, some imagination. Built with Amiga also appears in the WWW section of our cover CD-ROM, but the site has been recently updated.

Built with Amiga not only shows that high quality web sites can be produced with the Amiga, with links to a number of them, it contains details on the software to help you with this. It also emphasises the importance of ensuring that web pages work correctly on a wide variety of platforms.

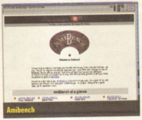
The other, complimentary, site is Made on Amiga. This is more of a directory of Amiga-authored sites, complete with a search engine to find specific sites within its database.

It contains a large list of Amiga based sites, indexed by category, as well as links to newly added sites, and the almost obligatory "cool site" button. Both sites provide an insight into the quality of web pages that can be, and are, produced using Amigas only.

Do you want to upgrade your system, but can't afford new hardware? Or have you already upgraded and want to sell your old hardware/software? Maybe you want another Amiga or is your Christmas money simply burning a hole in your pocket?

In any case AmiBench is the place for you. AmiBench carries a large number of for sale and wanted ads for Amiga hardware and software. Whether you're buying or selling, advertising is free.

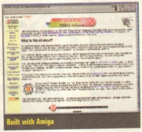
A number of Amiga users also have Psion palmtop computers. Even though the latest Series 5 has no software to network it with the Amiga (yet) it's still a very useful tool. The latest news on the Psion web site is the release of the Messaging Suite, a TCP/WWW/Email/Fax package. The initial version could only be installed from a PC, but now there's a generic installer too and the best news is that it's free, which are easily modified to suit other providers.


AmiBench
AmiBench at a glance

Amibench

The first all-new high performance Zorro III Amiga based motherboard.

Boxer


What is this all about?

Built with Amiga

Although browsing the web in 16 colour greyscale on a small 640x200 screen is hardly ideal, it's a lot more portable than any Amiga. The email software is most useful, allowing you to check your email anywhere there's a phone socket.

It provides full POP3 mail, and the networking software comes with pre-defined dialup scripts for several UK ISPs. While you're on the Psion site, why not drop them a mail asking when they will provide the information needed to port AmigaNCP to the S5? Series 5 owners should also take a look at Total S5! It's almost the Psion equivalent to the Amiga Web Directory.

The HTML Writers Guild provide resources for "World Wide Web page authors and Internet Publishing professionals". It sounds a bit grandiose, but the site is certainly worth having a look at. It contains links to a wide range of definitive WWW and HTML resources, as well as mailing lists and other services.

This has all been a bit serious so far... time for a bit of fun. As it says on the Dilbert Zone, "it's better than working" I'm not even going to attempt to describe what you'll find here, since I couldn't possibly do it justice. Just go to The Dilbert Zone and see for yourself. One word of warning, if you access the web at work, make sure your boss doesn't see what you're doing.

There were several new "Amigas" announced at the Cologne show. One of the most interesting looking is the Boxer. Their home page currently give prototype details, but may contain more concrete information by the time you read this. ■

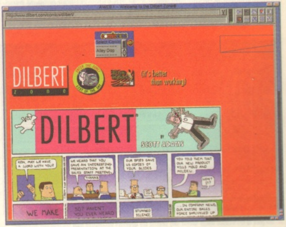
Neil Bothwick

URL's

http://www.amiga.u-net.com/BuiltWithAmiga/home.html
Built with Amiga
http://www.gonmad.demon.co.uk/moa/index.html
Made On Amiga
http://thunderstorms.org/AmiBench/index.html
AmiBench
http://www.psion.com
Psion
http://ady.net/psion
Total S5!
http://www.hwg.org/ HTML
Writers Guild
http://www.dilbert.com/
The Dilbert Zone
http://www.cix.co.uk/-index/welcome.htm
Boxer

Message Suite Overview
Email / Fax
Web

Total S5


AWEB.1 - Welcome to the Dilbert Zone®

http://www.dilbert.com/comics/dilbert/

Select Comic
Alley Oop
DILBERT
ZONE
(it's better than working)
DILBERT
BY
SCOTT ADAMS
KEN, MAY WE HAVE A WORD WITH YOU?
WE HEARD THAT YOU GAVE AN INTERESTING PRESENTATION AT THE SALES STAFF MEETING.
THANKS
OUR SPIES GAVE US COPIES OF YOUR SLIDES
YOU TOLD THEM THAT OUR NEW PRODUCT KILLS MOLD AND MILDEW.
WON'T IT?
WE MAKE
SO? HAVEN'T YOU EVER HEARD
STUNNED SILENCE
...IN COMPANY NEWS, OUR ENTIRE SALES FORCE SHRIVELED UP

▲ Fun and frolics In the Dilbert Zone

Wired World

Mat Bettinson continues the beginners guide to setting up a web page, this month delving further into Webplug's capabilities.

Last month we used WebPlug to lash up a basic web page and then we uploaded this to the FTP server of our Internet Service Provider. A common cause of confusion has been how to handle working with the FTP site and creating pages that work off your hard drive and also the Internet when uploaded. Here's the foolproof method for creating completely 'relative' pages that run perfectly wherever they're placed.

It's safe to say that as you proceed past the most basic type of web page, you'll want to include images and sub pages. Getting used to organising them neatly is good plan before we get too involved.

Your first page is usually called index.html and it must reside in the 'root' of your web site. You have virtually unlimited control of your web site structure from the root onwards. That means you can place files here and create directories.

Manageable web site

Creating directories is optional but it helps to make things neater and more manageable. In the simplest case, we could create a directory called 'images' and use this drawer to store all of the in-line images on our web pages. The root could still be used for the html files themselves. In order to create a directory, you log on to your FTP space on your ISP with an FTP client and simply use the create dir function.

While it's possible to link to images with a tag like: <IMG SRC=http://www.yoursite.co.uk/images/picture.gif>, this really isn't a good idea. Far better to use 100% relative links like: <IMG SRC=images/picture.gif> which really will do the same thing if they are found in a document at our site.

The upshot is that the same code will work perfectly of our hard drive for a browser as it will on the web site. We can even move provider later without changing a single page.

The trick is to use an assign for your web pages. For example "Assign MyWeb: HD1:MyHTML", which can be placed in your s:user-startup to make it permanent of course. Now remember to create the directories you need here such as 'images'.

This should be a complete mirror of what will be uploaded to the web site later. Just remember to use all lower case filenames, this avoids mistakes later as your Amiga isn't case sensitive but Internet web servers are.

A further trick is to launch WebPlug via the CLI and from the directory which we're using as the root for your web site. You can either copy the WebPlug program to somewhere that is in your AmigaDOS search path such as the C: directory, or you can add a path statement such as "path hd1:web-plug add" to your s:user-startup. Then, assuming we've also make the MyWeb: assign, we can do the following: cd MyWeb:run WebPlug

This procedure will save us from having to delete the drive names from the paths that WebPlug will include every time you insert an image. A quick example; CD to MyWeb. Create a directory any way you like, you can just type "makedir images" in the CLI. Copy a GIF or a jpg image from somewhere into the images drawer. Run WebPlug as we've covered above. Select Functions/Header. Give a name to your Web page. Leave "Add <BODY>" checked and hit insert.

Click on the blank line and choose Functions/Images, click on the pop-up file requester gadget just right of the image file box. If all has gone according to plan, the file

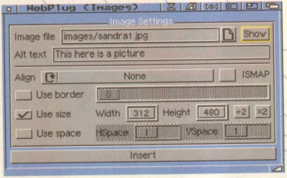


Image file: images/sandra1.jpg

Alt text: This here is a picture

Align: None ☐ ISMAP

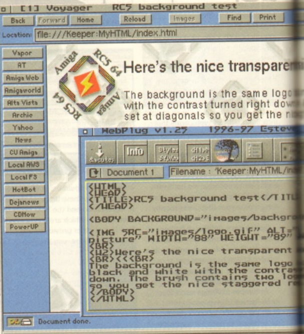
☐ Use border 0

☑ Use size Width 312 Height 480 ÷2 ×2

☐ Use space HSpace 1 VSpace 1

▲ Our path to the desired image should only contain the directory information from the root and no Amiga drive details. This way the page will work anywhere.

▼ The RC5 logo is a prize example of how to make a transparent GIF and how to use a logo for a background image. See http://www.cistron.nl/~ttavoly/rc5 for the real thing.



Location: file:///Keeper:MyHTML/index.html

Here's the nice transpare

The background is the same logo
with the contrast turned right dow
set at diagonals so you get the n

Filename : 'Keeper:MyHTML/in

```
<HTML>
<HEAD>
<TITLE>RC5 background test</TITL
</HEAD>

<BODY BACKGROUND="images/backgr

<IMG SRC="images/logo.gif" ALT="
picture" WIDTH="88" HEIGHT="89"
<BR>
<H2>Here's the nice transparent
<BR><<<BR>
The background is the same logo
black and white with the contra
down. The brush contains two lo
so you get the nice staggered r
</BODY>
</HTML>
```

Document done.

Mail me!

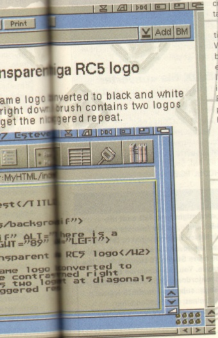
It's customary to include a link on your home page that visitors can click on to E-mail you. It's called a mail-to link and naturally enough, WebPlug handles this for us although not out of the box.

This is a good time to learn a new function of WebPlug called the Custom Tags feature. Select Functions/Custom Tags. Click new and you'll have three boxes to fill in. Fill the first one with "Mail me" and put this in the start box; "<A HREF=mailto:me@myaddress.co.uk>" where the E-mail address directly after mailto: (with no space) is your own address. Place "</A>" in the End box. Fix this and save your custom tags descriptions.

requester will start from your MyWeb: directory and you should see a directory called images. Go into there and click on the picture. After pressing Insert, we see that WebPlug has added the proper relative path. Now let's do something.

Here's the trick, take any document you have, type your name at the bottom and highlight it in the editor. Now open the Custom Tags GUI and Drag the Mail Me item to the main window. Bang! Your name should now be surrounded by a Mailto: statement which will have the effect of launching a mail client to mail this address.

Double check it by saving your HTML and launching your browser to check it out as detailed last month. Click on your name which is underlined and whatever mail function your browser employs should fire up to send an E-mail to yourself.



nsparen iga RC5 logo

ame logo nverted to black and white
right dow brush contains two logos
get the ni gered repeat.

```
7 Esteve
est</TITL
s/backgro if">
if" ALT=" here is a
GHT="89" ="LEFT">
nsparent  RC5 logo</H2>
ame logo  onverted to
e contra  ned right
s two lo  t at diagonals
ggered re
```

Backgrounds

Very broadly speaking, there's three main 'looks' of web. If we want our page to have a distinct character of its own, one of these styles will need to be employed.

These are identified by the background colour of the pages. We can have dark text on a white background, light coloured text on a black background or even use a tiled picture which repeats to create a background texture. Again all of these is chosen from.

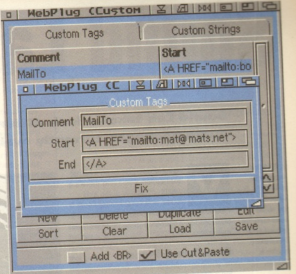
When you insert the HTML header with WebPlug, you'll notice there's a box to add the <BODY> tag or not. The reason is that if we want to modify the background, we'd best leave it off as there's a separate function for the background under Functions/Background cunningly. This will add a <BODY> tag with the required attributes.

To try out a backdrop, obtain a tiling backdrop image for use with Workbench. The kind that's a small brush that repeats to create a never-ending pattern. It'll probably be an IFF so convert it to a GIF and save it in your images drawer. In the Functions/Background GUI, click the pop-up gadget for the Back Images box and insert this image.

Insert it and load into your web browser, you should see the image in the background but it may make text hard to read. In order to get an effective background texture, it has to contrast with the foreground text so experiment with the text colour settings too. You'll probably find that using an image processor to bump down the brightness and contrast helps greatly.

Another neat effect is to use the Emboss function of an Image processor (this is in Ppaint too) and play with the contrast brightness so you get a white background with a gentle logo stamped in 3D relief. You may remember this from the first incarnation of CU Online. ■

Mat Bettinson



Comment	Start
MailTo	<A HREF="mailto:bo

Comment: MailTo
Start: <A HREF="mailto:mat@ mats.net">
End: </A>

☐ Add <BR> ☑ Use Cut&Paste

▲ **Adding a mailto custom tag for our own address means that we can quickly add a Webmaster mailto on the bottom of every page without typing it every time.**

You're so transparent

You may be wondering how some web sites make images that have transparent sections where the background can be seen underneath. This only applies if we have a textured background, of course, otherwise it can be faked by using the same colour backdrop as the images and some sites do indeed do this.

However, to gain transparency we need to make a so-called transparent GIF. Only GIF 89a supports this and there are a few Amiga programs that will allow you to make them, Image Studio and PPaint 6.6 from last month's coverdisks being the obvious examples.

In PPaint the easiest way to make a transparent GIF is to obtain a brush that has the transparent qualities you desire. Exactly how is beyond the realms of this tutorial but if the real background colour is designated as the background pen and you pick up a brush, you should find that PPaint will have successfully made the brush transparent. You'll see this as the transparent bits won't obscure the background picture as you move the brush around on screen. Now all you need to do is save as GIF in the save brush menu, select GIF 89a and deselect the same image format. What you have is a bonafide transparent GIF which you can experiment with by loading into your browser.

One very important thing to look out for is that the edges may need to be aliased towards the colour backdrop you have to avoid nasty edges. The most common effect is a blend to white used for white backdrops, the bad news is that doing this is a little on the tricky side and to do it properly you'll need a proper image processing package such as Image FX. In this case you'd paint the backdrop the colour of your web page, load in your brush and paste the 'feather out' function enabled. Experiment.

Then drop the image with the auto function so it will grab only the pixels that have changed in the middle. The result should be a brush which has the edges aliases gently to white and it will look superb. You might like to try a cute X-Files glowing effect by first pasting the image in a matte green a few pixels to each side, then stamping the image in the centre. This works best on black of course.

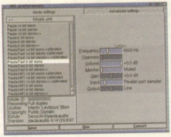
There's endless graphical tricks to use on web sites and the Amiga's toolkit of superb graphics software should provide endless opportunity to be a creative and original webmaster. Enjoy!

mat@mats.net

Sound Lab

Shareware Round-up

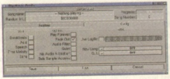
Sound Lab takes a look at some of the best of the current crop of audio packages currently available from the shareware scene.



Mode ID 0x0002000C
Recording Full duplex
Author Martin 'Leviticus' Blom
Copyright Public Domain
Driver Devs:AHI/paula.audio
Version paula.audio 4.14 (20.8.97

Frequency 8000 Hz
Volume +0.0 dB
Monitor Muted
Gain +0.0 dB
Input Parallel port sampler
Output Line

▶ **AHI helps overcome the problems involved in getting various sound cards and software packages working together in harmony.**



Via our cover CDs or an Internet connection, you'll find there's a wealth of quality audio and music software available for next to nothing. This month's Sound Lab is dedicated to a round-up of some of the best examples.

Free Bars & Pipes

As you might already know, Blue Ribbon SoundWorks was bought by Microsoft a few years ago. Shortly after, Microsoft made all of the Blue Ribbon Amiga music software freely downloadable from Compuserve. If you do not have access to Compuserve and want these programs, you will be pleased to know that you can now get these programs on the web at:
http:// www.in2net.com/bws/ blue

Here you will find freely downloadable archives of Bars & Pipes Professional (sequencer), Patchmeister (generic patch librarian) and SuperJam (improvisational music generator). You can also download the following expansion kits for Bars & Pipes Professional: Creativity Tools, Performance Tools, Power Tools and Pro Tools.

Be sure to read the Microsoft End User Licence Agreement before downloading any of this software. You will also find a previously commercial algorithmic composer that turns algebraic equations into music for Bars & Pipes.

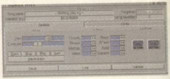
There are a number of mailing lists and web sites set up to support users of Blue Ribbon software. One of the more detailed web sites is called Modern Plumbing which includes support for Bars & Pipes, Patchmeister and SuperJam. Here you can find helpful tips and tricks, workarounds for bugs, new tools, accessories, drivers and styles: http://www.execulink.com/~jtech/b&p/ Or visit Richard Hagen's website for more information and links to other support sites: http://www.cs.uq.edu.au/~richard/music/bars-and-pipes/index.html

To subscribe to a mailing list for Bars & Pipes and related software, send an email to: jtech@execulink.com with the following command in the body of your email message: subscribe b&p <your email address>

Sound FX

One of the best digital audio processors available for the Amiga is a shareware program by Stefan Kost called Sound FX. Sound FX includes over 50 effects. The more common types such as amplifier, echo, chorus, delay, echo, envelope, equalisation, filter, noise gate, pan, phaser, pitch shift, and reverb are all included along with some more unusual effects like vocoder, clap, crosstalk, fold, gamma, logic, morph and smear. One of the more interesting features is Sound FX's ability to generate surround sound encoding. There are also audio analysis functions (2D and 3D spectrum analysis, Fourier transformation) and even sound synthesis support.

Every function has extensive parameter and modulation options and the capability to save and load your own effect configurations. Through its fully developed ARexx port you can create automated processing scripts or even generate your own digital effects.



▲ **Let your Amiga compose and play its own tunes in realtime with the fascinating AlgoMusic.**

Sound FX includes loaders and savers for all common audio file formats including Sample Dump Standard (SDS), Studio 16 and Yamaha's TX-16W format. Audio playback can be done through the Amiga's built-in audio chip, Paula, with 8-bit and enhanced 14-bit modes or via AHI to a sound card.

Sound FX requires at least OS 3.0 and as with any program like this, the more CPU power and memory you have the faster and better it will work (some processes can take ages). Support for virtual memory is currently under development. You can get recent archives from Aminet (found in the mus/edit section). All the relevant archives are named 'sfx-' something or other.

Alternatively visit the author's website for the latest version at: http://www.imn.htwk-leipzig.de/~kost/SoundFX.html

AmiSOX file converter

SOund eXchange (SOX) is an audio file format converter. It has been ported from the UNIX version to the Amiga by David Champion. AmiSOX has been around for several years, but remains a favourite and efficient conversion utility. Currently, the Amiga version supports the following formats: RAW, IRCAM, Sound Blaster, SPARC .AU, Mac HCOM, PC/DOS .SOU, Sndtool,

Sunrize support

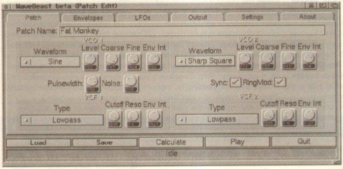
Anyone who uses a Sunrize AD516 or 1012 sound card might have felt a bit distanced from the recent developments in Amiga 16-bit audio, as the formats used by these systems are non-standard. However, Kenneth Nilsen has managed to fathom the mysteries of the Studio 16 format and publicised the results in the form of developer docs. With any luck this should mean we'll see more Studio 16 support from the established 16-bit sampling packages in the near future. You can subscribe to a Studio 16 Internet mailing list by sending email to: majordomo@thule.no with the following command in the body of your email message: subscribe studio16 <your email address> You can get the latest archive from Aminet: Studio16add.lha dev/misc or visit the Studio 16 and AD516/1012 support area:http://www.youngmonkey.ca/hands/files/Sunrize/index.html

WaveBeast virtual synth

WaveBeast is a freeware software synthesiser developed by Marco Thrush and Jan Krutisch. It is currently in a beta stage but is publicly available.

Sound generation is controlled by two oscillators with standard waveforms (noise, pulse, sawtooth, sine, square and triangle), two 24dB four pole filters (low, high or bandpass), four multi-stage envelopes (VCA, Pitch, VCF1 and VCF2), five LFOs (pulse width, pitch, VCA, VCF1 and VCF2) and digital effects (delay, fuzz and reverb).

It also includes a 64 step sequencer with adjustable tempo, sequence transposition, and step settable slide and portamento parameters. It requires at least OS 3.0, MUI and AHI. An intensive calculation process is necessary to generate waveforms, so it doesn't operate in real-time. Lots of CPU power is good but not required. Because waveforms are generated in memory, the more memory you have the bigger your generated waveforms can be. You can get the latest version from the support site at: www.rzbd.fh-hamburg.de/~s1469005/amiga/wavebeast.html



Patch Name: Fat Monkey

Waveform: Sine

Waveform: Sharp Square

Pulsewidth:

Noise:

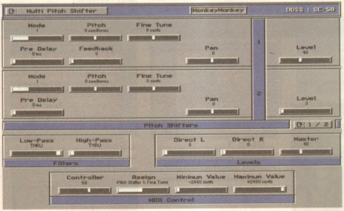
Sync: ☑ RingMod: ☑

Type: Lowpass

Type: Lowpass

Idle

◀ WaveBeast offers a series of control panels that mimick a hardware synth, then goes off and renders wild sounds which can then be output as audio or samples.



Mode 1

Pitch 0 semitones

Fine Tune 0 cents

Pre Delay 0 ms

Feedback 0

Pan 0

Level 40

Mode 1

Pitch 0 semitones

Fine Tune 0 cents

Pre Delay 0 ms

Pan 0

Level 0

Low-Pass THRU

High-Pass THRU

Direct L 0

Direct R 0

Master 40

Controller 59

Assign Pitch Shifter 1: Fine Tune

Mininum Value −2450 cents

Maxinum Value +2450 cents

◀ MIDI users wanting to exert more control over their gear are well catered for with MIDI SYStem EXplorer (MSE to its friends).

Sounder, NeXT .SND, Windows RIFF/WAV, Turtle Beach .SMP, and Apple/SGI AIFF and 8SVX.

In addition to format conversion, it can also do some simple digital processing: echo, filtering (low, band and high pass), mix, resampling and vibrato. You can get the latest archive from Aminet: AmiSOX33.lha mus/edit 316K SOX

AlgoMusic

If you would rather leave the song writing to your Amiga, or perhaps you just need some inspiration or entertainment, then Thomas Schürger offers his giftware program AlgoMusic.

Songs are 'randomly' composed based on a series of pre-programmed rules or algorithms. Generally, programs of this type generate music in a specific style. AlgoMusic is designed to create techno/house style music. Among its numerous parameters are a real-time mixer for setting the levels of the different tracks: acid, bass, back beat, chords, drums, melody, main and speech; and also real-time controls for tempo and tuning. You can also tell AlgoMusic whether or not to include acid, breakbeat, echo, free melody and speech parts in its compositions.

The program comes with many of its own samples, which it randomly chooses from when composing. You can, if you want, add your own samples. AlgoMusic requires at least OS 2.0 and MUI is also required if you want to use the preferences program. CLI parameters are also available if you do not have MUI installed. You can get the latest archive from Aminet: AlgoMusic2_3.lha mus/misc or visit the author's website for the latest version at:http://fsinfo.cs.unisb.de/~schuerge /AlgoMusic/

Audio Hardware Interface

In an attempt to bring a standard to Amiga audio, Martin Blom developed the freeware software (donations appreciated) called AHI. AHI is an audio subsystem, designed to be expandable, hardware-independent, and system compatible. It allows applications to share the audio resources, so that several programs can process sound simultaneously.

AHI currently supports the following sound hardware: Aura, Clarity, Concierto, Delfina DSP, Delfina Lite, DraCo Motion, Maestro Pro, Melody MPEG, Paula (Amiga built-in), Prelude, Toccata and Wavetools. You can get the latest archives from Aminet:

ahidev.lha dev/misc 339K
ahiman.lha docs/misc 257K
ahiusr.lha mus/misc 287K

or visit the author's website for the latest version at:
www.lysator.liu.se/(all)/~lcs/ahi. html

MIDI SYStem EXplorer

We finish off with my own shareware offering to the Amiga MIDI world: MIDI SYStem EXplorer. MSE has been designed to control all types of MIDI data through a programmable graphic user interface or by external software control. MSE can be used as a simple MIDI Controller or a complex patch editing system, allowing the user to enter MIDI information from manuals to control almost anything. Possible applications include: MIDI volume/pan mixer (with automated fading), sound editor and patch librarian. With the definition language you can design the entire user interface to meet your needs. Screen mode/size (Amiga/CyberGFX/etc.), window size and position, fonts, borders, colors, gadget placement etc can all be customised. You can also define the character set, MIDI port and much more.

MSE has direct support for the BlueRibbon.library (B&P, TriplePlayPlus), CAMD.library (DeluxeMusic) and MIDI.library (PD) allowing simultaneous use with other programs that also use these libraries. You can get the latest archive from Aminet: MSE.lha mus/midi 191K or visit the MIDI SYStem EXplorer support area:http://www. youngmonkey.ca/hands/files/MSE/index.html ■

Dhomas Trenn

On the CD

You can find all the freely distributable software mentioned here on this month's CD in the CUCD/Magazine/SoundLab drawer, along with over 600Mb of other great software too.

Desktop Publishing

Professional Page 4.1

PART 10

Larry Hickmott is here again with some more tips and hints for using ProPage 4.1. This time with a view to designing Web pages.

The main reason I use DrawStudio is for creating titles for desktop publishing work I undertake but the good news for every DrawStudio user is that the principle behind creating titles for DTP can be applied to making titles for video, web graphics and lots more.

Lets say you want to create an image that you need to use a number of different ways. The advantage in using DrawStudio is that the same image can be used for all your needs. If a printed copy is what you want, you can print the image from DrawStudio, which is especially effective if you have a decent colour printer, TurboPrint 5 and version 2 of DrawStudio.

Anyone who has the CD cover from the book I publish on DrawStudio will no doubt give testimony to that.

If however, you also need a bitmap copy of the image, you can export the title at a resolution suitable for your WEB page, video application or for any other use where the image may be useful.

The example I created for this tutorial was exported 1200 pixels wide and on a desktop printer on A4 paper, printed fine. There's more. As well as needing to only create one image, you can also export any copies of the picture you need in various graphic formats suitable for WEB pages (JPEG & GIF), video (256 and 24-bit IFF-ILBM) and other platforms (BMP, TIF and so on).

Which leads me to this month's tutorial. The image is based on an idea I saw in a magazine advert and contains a number of things which I will explain so you see some of the possibilities using the features in DrawStudio Lite and DrawStudio V2.

Do remember however, that where there are transparent objects that the transparency will be lost if printed or exported from DrawStudio Lite. This is because transparency is only supported by 24-bit print and export modes that are contained in version 2.

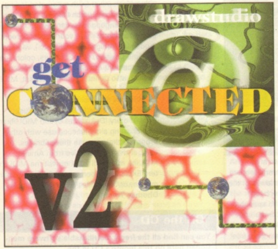
If you want to print or export images with transparency intact then you will need to upgrade to version 2 for the paltry sum of £29.95 including postage. Call me on 01908 370 230 for details. ■

Larry Hickmott

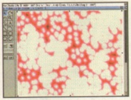
Looking Good

Take a look at the example picture which is the basis for this tutorial and make a note of the elements. The overall theme for many of the elements is a piece of text with a blurred shadow of some sort which lies over the top of a bitmap image.

Lets take a look at this piece by piece.

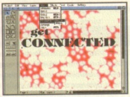


▲ Here is the result of the tutorial. A picture created in DrawStudio Lite but exported from version 2 so you can see it on the page in this tutorial.



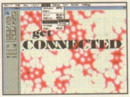
▲ Step 1

Using the Place command which is on the Project menu, import a bitmap image like this. For those that have DrawStudio V2, this image is on the CD in the Textures directory (TXTR02.JPG).



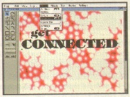
▲ Step 2

Using the Text tool, type some text over the bitmap image. Use the Font item on the Text menu to change the text to a style you want for your image. Do this now because you won't be able to do it later.



▲ Step 3

Convert "Connected" to a Bezier curve using the command in the Object menu.



▲ Step 4

Choose Ungroup from the Object menu. Then delete the letter O. To continue, click once on letter C, hold down shift and click on all the letters in the word "CONNECTED".
With all the letters selected, choose Make Compound Object from the Bezier menu. This allows you to apply the gradient to all the letters as one object.

Problem Solver

I have used DrawStudio for two years with no problems. Mainly because the 1200's I use are fairly standard in terms of what software is running on Workbench. MUI is the unregistered (but licensed) version we distribute with the program, I've no patches in my User-startup and regularly re-install Workbench to keep it fresh and uncorrupted. Thank god it's much easier than re-installing Windows 95! Anway, here are some tips for you.

Magic User Interface

First up MUI. In most cases, the people ringing me have been those that have a registered version of MUI 3.8 or are using MUI from the CUCD that contained DrawStudio Lite. Those that have MUI from us haven't had any problems.

If you are using MUI 3.8, rename the current MUI directory to MUI3-8 and then create a new drawer called MUI in the same partition. Now install MUI again and leave the MUI settings alone for now. If you are running MUI from the CUCD, just install MUI onto your hard drive. The installer will make the drawer and add any assigns.

Try running DrawStudio now. If you still have problems, make sure the MUI Window refresh attribute is set to Smart and not Simple. If the program still has problems when you import bitmaps for example, this is a MUI problem.

In my experience of talking to those who've had problems, most were caused by MUI. Someone couldn't get DrawStudio to function but after changing to a standard version to get IBrowse to work, they also found DrawStudio worked. If none of the above works, see Last Resort.

NTSC Problem Solver

Here is a quick one for our American cousins over the water. If when you run DrawStudio it can't open a screen, try changing your Workbench to a PAL screen (Use not Save) and then run DrawStudio and choose an NTSC screen for it. Now reboot your Amiga and all will be well. Another trick is to rename the "DrawStudio Lite.prefs" file and see if that helps in running the program.

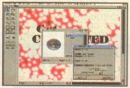
FPU?

If you have an FPU and have problems with the DrawStudio Lite FPU version, there is little difference between it and the non-FPU version. I've used both and not visually noticed any difference. It's also come to my attention that this FPU problem was non-existent in the V2 upgrade.

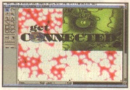
Last resort

A useful tip: Backup your current Workbench to a drawer (such as WB_Backup) on another partition, format (use Quick option if you're nervous) your Workbench partition and then re-install Workbench using the set of disks that came with your Amiga. I spoke to someone recently who also found it handy because even after re-installing MUI, the problem he had was still present. A fresh Workbench and installing MUI from the disk that comes with DrawStudio and all was well again.

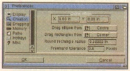
Looking Good continued...



▲ **Step 5** A bitmap is imported using the View/Bitmaps menu item. This picture replaces the 'O' deleted in step 4. The bitmap has a white background, then transparency is turned on so the white bits aren't visible when you place the picture on the page. Note this image was 24-bit where the colour white (255, 255, 255) is made transparent by DrawStudio Lite. If the image was a palette based one, then make sure white is colour 0 in the palette.

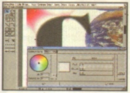


▲ **Step 6** A second background bitmap is placed on the page for effect.

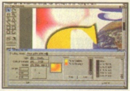


X 0.00 in Y 0.00 in
Drag ellipse from Centre
Drag rectangles from Corner
Round rectangle radius 0.22222 in
Freehand tolerance 3.6 Pixels

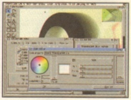
▲ **Step 7** Now check the Clone Prefs are correct for the following steps. Go to the Settings menu, choose Prefs. From the Creation Prefs panel, change the Clone offset to 0 in x and y directions. It means when you create a clone (right Amiga-t), it sits right on top of the original. You can re-position it using the cursor keys as we'll see in the next few steps.



▲ **Step 8** Click on the word CORRECT. Clone it and move the clone to one side (away from the original). Apply a very transparent fill to the original piece of text such as a 13% black. Clone this text, choose Object/Specs menu item and scale the clone 1% bigger by entering 101% in x and y. Use the cursor keys to slightly move the text up and left. Clone over and over and keep on scaling clones until you get the blurring effect you want.

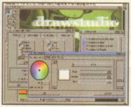


▲ **Step 9** For the final layer of text, select the clone that was placed aside in step 8, bring it to the front (right Amiga-f), and then choose Object Attributes. Give the text a gradient fill like this. Place it over the top of the blurred text.

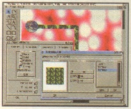


▲ **Step 10** In the example image you'll notice some text "V2" in black. Behind the text you will see another example of using transparent text to create an effect.

This one was done by using a very transparent black and moving each clone a tiny amount to the left without any scaling up or down. Using a Serif style font gives the impression of movement as well.

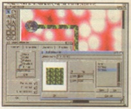


▲ **Step 11** As in step 10, this text uses transparency to create an impression of movement but this time use a solid white for the top layer and transparent white clones beneath. The closer you zoom, the less movement there is as you press the cursor key to move a clone.



▲ **Step 12** On the example image, you will see a line connecting little pictures of earth, which incidentally was taken from Phase 1 CD. This line was drawn using the Bezier/Line tool.

A tip with this tool is to hold down the shift key while drawing the line (keeps it straight) and don't drag the mouse but rather click once to stop the line and continue onwards. To finish, double click the left mouse button. The line is given a heavy line weight of 8 points and a bitmap fill as seen here.



▲ **Step 13** This is what the final image looked like in DrawStudio Lite. To create the sample image, I loaded the saved file into version 2 of DrawStudio and exported as a 24-bit JPEG.

SHAC

SECOND HAND AMIGA CENTRE

TEL 01983 290003

SALE SALE SALE SALE

A1200 £99.99

till end of Feb 98

10% off all games software

5% off all hardware

- Only with this ad

WE ALSO PURCHASE PERIPHERALS POA

SEND SAE FOR LATEST LIST TO:
SHAC, 69 KINGS ROAD, EAST COWES,
ISLE OF WIGHT, PO32 6SE
Tel:0410 067525

Mail Order Only

Convert your Amstrad

COLOUR MONITOR £10

Our custom made leads will convert your old Amstrad Monitor to work with your Amiga giving a crisp R.G.B. colour picture & optional quality amplified stereo sound.

	DIY	MADE
464/6128 (CTM644/0) Picture Only	£6	£10
464/6128 (CTM644/0) Inc Stereo Speakers	£31	£40
464/6128 PLUS (CM14) Inc Sound	£9	£15
464/6128 Green (GT-65) Picture Only	£6	£10

**Dept CU, Hagars Electronics,
127 High Street, Sheerness, Kent ME12 1UD**

Tel/Fax 01795 663336

Money back approval P&P inc.

CQ/PO DELIVERY 2 DAYS

KEW = II

SOFTWARE

Est. 1989

THE BEST IN QUALITY PD & SHAREWARE
SUPPLIED ON BRANDED DISKS ONLY!

The LEADER -
OTHERS CAN ONLY FOLLOW!

FREE FRIENDLY HELP BY
POST or PHONE ANYTIME!
FREE CLUB MEMBERSHIP

PICK YOUR OWN PROGRAMS!
BY NAME, NUMBER AND SIZE!
IT'S EASY!
500K makes 1 bootable disk!
800k makes 1 non bootable disk!

CATALOGUE WITH FULL DESCRIPTIONS & INDEX ONLY £1

Phone for the LATEST PROGRAMS!

*1-3 disks £1.50,
4 or more ONLY £1.25*

P.O BOX 672
South Croydon
Surrey CR2 9YS
Tel: 0181 657 1617

FREE P&P

ONLINE PD

Telephone: 01704 834335 / 834583 Fax / BBS: 01704 834583

SPECIAL SOFTWARE PACKAGE DEALS

FULL GUI INTERNET PACKAGE (HD REQ.) - 30 DISKS	£21
(OUR FAMOUS) FULL GUI INTERNET & COMMS PACKAGE (HD REQ.) - 37 DISKS	£25
COMMS PACKAGE - 8 DISKS.......£8 / KIDS DISKS (EDUCATIONAL) #1-7 DISKS	£5.25
MAGICAL USER INTERFACE PROGS. #1 & #2 - 12 DISKS PER PACK	£8.25 EACH
ADOBE FONTS #1, #2, #3, #4 & #5 - 15 DISKS PER PACK	£10.50 EACH
COLOUR IFF FONTS #1, #2 & #3 - 11 DISKS PER PACK	£7.50 EACH
MONO IFF FONTS #1, #2 & #3 - 12 DISKS PER PACK	£8.25 EACH
IMAGINE TEXTURES / OBJECTS - #1, #2 & #3 - 9 DISKS PER PACK	£6.75 EACH
SPECTRUM GAMES #1, #2, #3, #4, #5, #6, #7 & #8 - 16 DISKS PER PACK	£11.25 EACH
SPECTRUM GAMES #9 - 11 DISK PACK..........£7.50 OR ALL 139 DISKS FOR ONLY	£85
COMMODORE 64 GAMES #1, #2, & #3 - 12 DISKS PER PACK	£8.25
COMMODORE 64 GAMES #4 - 11 DISK PACK.....£7.50 OR ALL 47 DISKS FOR ONLY	£30
CG (COMPUGRAPGHIC) CLIP ART #1 - 9 DISKS	£6.75
CG FONTS #1, #2, #3, #4 & #5 - 15 DISKS PER PACK	£10.50 EACH
CG FONTS #6 - 12 DISKS..............£8.25 / SAMPLES VARIOUS 300+ - 11 DISKS	£7.50
DESKTOP VIDEO #1 & #2 - 12 DISKS PER PACK....£8.25 / VIDEO GOLD - 10 DISKS	£6.75

FREE POSTAGE & PACKING ON ABOVE PACKS

PD DISK PRICES

ANY AMOUNT OF PD DISKS......75p EACH
EVERY 10 DISKS ORDERED CHOOSE 1 FREE

POSTAGE & PACKING

UK PD Orders	75p Per Order
EUROPE	Add 20%

Rest of WORLD please add 30% to total order value with a minimum of £1.25 for both

BLANK DISKS

10-20 Disks	35p Each
21-499 Disks	30p Each
499-999	25p Each
1000+	POA

HI-QUALITY DISKS, 1 FOR 1 REPLACEMENT GUARANTEE ABOVE PRICES INCL. LABELS & **FREE P&P** (Min. order 10)

PHONE for FREE 3 disk catologue OR send 39p SAE (ALL ORDERS SENT OUT BY 1ST CLASS RETURN POST)

COMPATIBILITY KEY: ❑ All titles will work on A1200 & A4000 except (*). ❑ All titles except (AGA) will work on A500+ & A600.
❑ All titles except (AGA) or (X) will work on A500. (KS2+) or (KS3+) = Requires that particular version of kickstart or above.
(2), (3) or (4) etc. = The amount of disks a title is. (2D) = Requires 2 disk drives or HD. (HD) = Requires a hard drive.

CLASSIC GAMES
- ❑ Donkey Kong (AGA)
- ❑ Missiles Over Xenon (AGA) (2)
- ❑ Missile Command Defender
- ❑ Motorola Invaders (AGA) (2)
- ❑ Popeye
- ❑ Donkey Kong
- ❑ Bagitman
- ❑ Frantic Freddie
- ❑ Zaxxon
- ❑ Asteroids
- ❑ Deluxe Gal. V2.8C (AGA)
- ❑ Deluxe Galaga V2.5
- ❑ Yet (Donkey Kong+) (AGA)

FRUIT MACHINE GAMES
- ❑ Ambassador V2+ (X)
- ❑ Loads'A Money
- ❑ Poker Mania
- ❑ Cash Fruit
- ❑ Super Mega Fruits
- ❑ Coin Drop (2MB)
- ❑ Ultimate Fruit M. (KS2+)
- ❑ Fruit Machine II
- ❑ Black Knight (X)
- ❑ Amiga Win (AGA)
- ❑ Winning Post (X)
- ❑ Fruit-Mania
- ❑ Fruit Crush

BOARD GAMES
- ❑ Monopoly
- ❑ Scrabble
- ❑ GNU Chess (X)
- ❑ Reversi II (Othello+)
- ❑ Othello
- ❑ Pro. Bingo
- ❑ Cluedo
- ❑ Jeopard (Risk)
- ❑ Diplomacy II
- ❑ Shanghai
- ❑ Rags To Riches
- ❑ Black Jack
- ❑ Doze (AGA) (HD) (2)
- ❑ Checkers AU V1.1

BEAT'EM UP GAMES
- ❑ Fighting Warriors
- ❑ Cyber Games (2)
- ❑ Martial Spirit (X)
- ❑ Supreme Fighter
- ❑ The Art Of Breaking
- ❑ Heads (AGA) (6)

SHOOT'EM UP GAMES
- ❑ (AGA)
- ❑ Argus (X)
- ❑ Thelska XIII (AGA)
- ❑ Torque (AGA)
- ❑ T-Racer (2)
- ❑ Evil Insects (AGA)
- ❑ E-Type

DRIVING GAMES
- ❑ Mangled Fenders
- ❑ Indycar Challenge (X)
- ❑ S-Skoda Challenge & Editor
- ❑ Flaming Engines
- ❑ Motorway Madness V1.1 (X)
- ❑ Battle Cars 2
- ❑ Knockout V2.03 (X)
- ❑ Aerial Racers (2MB) (X) (3)
- ❑ Hyper Race (X) (2)
- ❑ Last Lap (AGA)
- ❑ Cyberace
- ❑ Speed! (AGA)
- ❑ Hi Octane II

ADVENTURE GAMES
- ❑ Starbase 13 (2)
- ❑ Black Dawn
- ❑ Psycho Ward
- ❑ Knightwoode
- ❑ Temporal Misplacement (X)
- ❑ Madhouse (AGA)
- ❑ Legions Of Dawn (X)
- ❑ Black Dawn 5 (2)
- ❑ Emotional Conflict (X)
- ❑ Inner Demons (4) (X)
- ❑ Dead Of Night (3)
- ❑ Castle Of Doom
- ❑ Six Adventure Games

TETRIS GAMES
- ❑ Giger Tetris (AGA)
- ❑ Spelltris
- ❑ Super Twintris
- ❑ Tetrix
- ❑ Klaktris
- ❑ Holblox
- ❑ Megablock II
- ❑ Pill Mania
- ❑ Pentris
- ❑ Dr. Mario
- ❑ Squigs (X)
- ❑ Hextris
- ❑ Ditris
- ❑ 6 Player Tetris (AGA)
- ❑ Tetris Pro. 2000 AD (X)
- ❑ Tetris Mania (7 Tetris's)

BREAKOUT GAMES
- ❑ Megaball V3 (AGA)
- ❑ Waynes World Pong (X)
- ❑ Double Battle
- ❑ Maniac Ball (AGA)
- ❑ Poing 5 (AGA)
- ❑ Boris Ball
- ❑ Knock Out (AGA)
- ❑ Power Walls
- ❑ Poing 4 (AGA)
- ❑ Potatas IV V1.30 (AGA)
- ❑ Breaking Bricks (AGA) (HD)
- ❑ Escapade
- ❑ Spin Brix (AGA)

RPG/STRATEGY GAME
- ❑ Risk (AGA)
- ❑ Legend Of Lothian
- ❑ Colonial Conquest 2 (X)
- ❑ Global Thermo. Warfare
- ❑ Cyberdrone (X)
- ❑ Moria V5.5 (HD)
- ❑ Dungeons Of Nadroj
- ❑ Escape From Doom

EMULATORS & EMU. GAMES
- ❑ ZX Spectrum & 38 games
- ❑ Zxam V2.0b (X)
- ❑ MAGIC 64 (1020 & 3MB) (X)
- ❑ C64 1541 Utils #1
  (SEE 'SPECIAL PACK DEALS' FOR EMULATOR GAME DISKS)
- ❑ Vic 20 & 25 games (X)
- ❑ Amstrad CPC 664 (AGA)
- ❑ Apple 2000
- ❑ BBC Emulator
- ❑ Oric-1/Atmos 48K V1.4 (KS3+)
- ❑ Nintendo Gameboy (AGA)
- ❑ PC Task V4.2 (2MB) (KS2+)
- ❑ CD32 Emulator (AGA)
- ❑ Shapeshifter V3.8 (MAC) (4MB HD) (X)
- ❑ Kickstart 2
- ❑ Kickstart 3 (X)
- ❑ Kickstart 3.1 (X)

QUIZ GAMES
- ❑ Red Dwarf Trivia V6
- ❑ Quingo
- ❑ Star Trek TNG Trivia (2D) (2)
- ❑ Joker Poker (X)
- ❑ Ultimate Quiz
- ❑ Wots-Its-Name V1.21
- ❑ Quiz Time (3 quiz's)
- ❑ Child Quiz
- ❑ Squiz (music)
- ❑ Dinowarp (dinosaurs) (X)

CARD GAMES
- ❑ Crazy Eight's V2.4 (X)
- ❑ Solo Card Games (X) (2MB)
- ❑ Amiga Demon V1.01
- ❑ Card Games Deluxe (AGA) (3)
- ❑ Cardz V2
- ❑ Hi & Low Card Games
- ❑ King High
- ❑ Monte Carlo's Casini (X)
- ❑ Excellent Card Games V3 (AGA) (5 games on 1 disk)
- ❑ Rummy Cards
- ❑ Couples
- ❑ Solitare (5 games)
- ❑ Tarot Cards
- ❑ Casino BlackJack V1.02 (X)
- ❑ Klondike 3 (4) (AGA) (HD)
- ❑ Klondike 1 (3) (AGA)
  100's & 100's OF KLONDIKECARD SETS ARE AVAILABLE

PLATFORMER GAMES
- ❑ Jet Set Willy '97 (X)
- ❑ Platman
- ❑ Alien Fishfinger (X)
- ❑ Jet Set Willy 3 (X)
- ❑ Dangermouse
- ❑ Wally World (2)
- ❑ Top Hat Willy
- ❑ Son Of Blagger
- ❑ Trap'Em (X)
- ❑ Jet Set Billy
- ❑ Willy Castle Of Dreams
- ❑ JSB & Editor (AGA) (2)
- ❑ Danger Dogg V1.5 (1.5MB) (X)
- ❑ Kellogs Land (1.5MB)
- ❑ Nicky 2
- ❑ Unusual Case Of Dr Strange (AGA)
- ❑ The Last Soldier (2)

2 PLAYER FIRE'N KILL GAMES
- ❑ Brutal Homicide V1.98 (X)
- ❑ Super Combat 3 (X) (1.5MB) (2)
- ❑ Rokelz V2.25 (AGA)
- ❑ Turbo Rakett V3.99 & V2.13
- ❑ No Mans Land
- ❑ Thrust Duel
- ❑ Bratwurst V1.01 (AGA)
- ❑ Tankhunter (X)
- ❑ Extreme Violence Game
- ❑ Trick Or Treat
- ❑ Scavenge (AGA)
- ❑ Solar System Wars V1.38 (X)
- ❑ Alien Frenzy
- ❑ Skiddy Things
- ❑ Battle Games (6 games) (X)
- ❑ Hotdog (4 Dogfights) (X)
- ❑ Shoot'Em All Up (1 ply) (AGA)

2 PLAYER MISC GAMES
- ❑ Kiss The Canvas (AGA)
- ❑ Solid II (3MB) (AGA)
- ❑ Truckin On (*) (2)
- ❑ Parachute Joust
- ❑ Iron Clads (2)
- ❑ Super Pong
- ❑ Total Domination (X)
- ❑ M*A*S*H
- ❑ Snakes & Ladders

TRON/SNAKE GAMES
- ❑ Nibbler V1.90 (AGA)
- ❑ Wormsign V30.16 (AGA)
- ❑ Cephalotron (X)
- ❑ Sneech (up to 10 players)
- ❑ Mega Tron V1.41 (X)
- ❑ Ringworm (AGA)
- ❑ Orbit (KS2+)

PUZZLE GAMES
- ❑ Jigsaw (2) (X)
- ❑ Tile Fall V1.5 (X)
- ❑ Shell (AGA)
- ❑ Plubz (AGA)

LOTTERY/HORSES ETC.
- ❑ Lottery Predictor V2.8 (X)
- ❑ Best Lottery Program
- ❑ Lottery League
- ❑ Cop The Lot Pro +2 more (X)
- ❑ Five Star - Lotto, Pools, Sweep, Digit & Horses
- ❑ Horse Forcaster V2.01B
- ❑ Race Master & Pools Master
- ❑ Pro-Gamble V2.1

MISCELLANEOUS
- ❑ F1 GP EDITOR V3.34 (X)
- ❑ 21 Games
- ❑ Chaneques (2) (X)
- ❑ Mr Men Olympics (2)
- ❑ Coarse Angler (2)
- ❑ Beavis & Butthead
- ❑ Knitmate & more
- ❑ Psychotronic Sound
- ❑ Astronomy V2.1
- ❑ ProCAD Electronic (X)
- ❑ TronICAD
- ❑ Scion V4.09 (X) (HD)
- ❑ Star Trek Guide (HD) (6)
- ❑ Friday Night Pool
- ❑ Trains (X)

EDUCATION
- ❑ Beginners Guide To WB 3
- ❑ Workbench 2 Tutorial
- ❑ Beginners Guide To WB 1.3
- ❑ Basic Note Tutor V2 (X)
- ❑ Bethany Zoo (X)
- ❑ Fishing (X)
- ❑ Learn Klingon V1.1 (KS3+)
- ❑ Beginners Typing Tutor (X)
- ❑ Tutankhamun (2)
- ❑ Comms Guide
- ❑ Internet Guide V2.3
- ❑ Basic Electronics (X) (2)
- ❑ Amiglobe (X) (2MB) (2)
- ❑ Desktop Music Guide (3)
- ❑ French Tutor & Quiz (X)
- ❑ Learn & Play+
- ❑ Highway Code Q & A
- ❑ Verb Quiz

PRINTING
- ❑ Text Engine 5 (X)
- ❑ Text Engine 4
- ❑ Easy Print V2.6 (AGA)
- ❑ Award Maker 2
- ❑ Canon Disk V3.90 (HD)
- ❑ Print-A-Card
- ❑ Final Wrapper V3.14 (X)
- ❑ Forms Unlimited
- ❑ Panasonic Studio
- ❑ Star Studio
- ❑ Citizen Print Manager
- ❑ Disk Stik V1.1
- ❑ Epson & Canon Drivers etc. (X)

UTILITIES
- ❑ A1200 Diagnostics (AGA)
- ❑ File Protector
- ❑ Super Duper V3.14 (X)
- ❑ Assign Manager (X)
- ❑ Disksalv 2 R11.32 (X)
- ❑ Disk Manager V4 (X)
- ❑ Exotic Music Ripper v3.2 (X)
- ❑ Menu Master 3
- ❑ Menu Launcher
- ❑ Filequest
- ❑ Sysinfo V3.24
- ❑ Abb V6.5 (X)
- ❑ Catalogue 3

UTILITIES (HD REQUIRED)
- ❑ MUI V3.8 (X) (2)
- ❑ Magic Workbench 2.1p (X)
- ❑ Abackup V5.14 (X)
- ❑ Snoopdos (KS2+)
- ❑ Atapi PlugNPlay V3.6 (X)
- ❑ Power Cache V37.115 (X)
- ❑ IDEfix 97 (X)
- ❑ OptyCDplayer V1.8 (MUI)
- ❑ 3,482 CD ID's for above (X)
- ❑ HD Games Installers - #1, #2, #3, #4, #5 & #6 (6)
- ❑ Tooldaemon & Mm emu (KS2+)
- ❑ AmiCDFS V2.38 (KS2+)
- ❑ Install Kit V2.2 (X)
- ❑ EPU Stakker/Expander V1.70

BUSINESS/OFFICE
- ❑ Ultra Accounts V4.3A (2MB) (X)
- ❑ Amiga Fox DTP
- ❑ Easycalc V2.0B
- ❑ Home Utilities
- ❑ Business Card Maker (X)
- ❑ 600 Business Letters
- ❑ Database Manager
- ❑ Amibase 4 V1.19 (X)
- ❑ Loans & Accounts
- ❑ Check It Out V1.02
- ❑ Excel Database
- ❑ GBase V2
- ❑ DDBase V7.81 (X) (1.5MB)
- ❑ Dnform V2.0 (X)
- ❑ Pay Advice V4.2
- ❑ The Little Office

GRAPHICS UTILS
- ❑ Transition (AGA)
- ❑ Visage V39.01 +GUI (AGA)
- ❑ Viewtek V2.1 (KS2+) (HD)
- ❑ Superview V5.41 (KS2+) (HD)
- ❑ Texture Studio V1.0.2 (AGA) (HD)
- ❑ Image Engineer V1.1 (AGA) (HD)

VIRUS KILLERS
- ❑ New Superkillers (for KS1.3's)
- ❑ Virus Workshop V6.5 (KS2+)
- ❑ Virus Checker V8.3 (KS2+)
- ❑ Virus Mixed Bag #1 (KS2+)

WE STOCK A MASIVE 17,000+ PD DISKS! ALL AT 75P EACH! SO IF THERE IS A DISK YOU ARE LOOKING FOR AND CAN'T FIND IT, WE MAY HAVE IT! PHONE NOW & FIND OUT

COLLECTIONS STOCKED i.e.; FRED FISH 1 to 1000, ASSASSINS GAMES 1 to 261, LSD UTILS 1to 149 + MANY MORE

AMIGA CD-ROM, CD32, CDTV & DISK SOFTWARE ALSO IN STOCK

We also accept cheques, PO's & cash.

2 year warranty

56K Dynamode Fax Data Modem only £119.99 plus £7.50 p&p

75p p&p per PD order

75P PER PD DISK

WINNER OF AMIGA FORMAT GOLD AWARD

MODEM INCLUDES A *FREE* £38+ STARTER KIT

Every 10 disks ordered choose 1 FREE

Online PD, Dept CU2(Q),
Unit 5, Embassy Building,
51A Piercefield Road,
Formby, Liverpool, L37 7DG

SPECTRUM GAMES ON CD-ROM

£15 inc. p&p

OVER **3000 CLASSIC** GAMES WORKS ON BOTH AMIGA & PC GAMES INCLUDE:-

PSST • COOKIE • MANIC MINOR • BUBBLE BOBBLE • ATIC ATAC • URIDIUM • SCUBBA DIVER ETC.

CHEQUES PAYABLE TO: **I OTTER,
DEPT CU, 5 VAUGHAN AVENUE,
GRIMSBY, N.E. LINCS, DN32 8QB**

CLASSIC AMIGA

P.D Software

Phone for a FREE catalogue disk

0161 723 1638

SHOP OPEN

12-9pm DAILY

FULL RANGE OF CD ROMS & CD32's
HARD DRIVES / MEMORY EXPANSIONS
CD ROM DRIVES
GAMES NOW IN STOCK

**11, DEANSGATE
RADCLIFFE
Manchester**

ADULT SOFTWARE

HOT, HOT, HOT ADULT CD-ROMs

YOU MUST BE 18 OR OVER

Send for our FREE catologue TODAY!!!

Micronine Software

*(DEPT CU), 11 CHAPEL STREET, RHYDYFELIN,
PONTYPRIDD, MID GLAMORGAN, CF37 5RG
TEL: 01443 662279 FAX: 01443662279*

CHROMA

CREATIVE HOME COMPUTING

GENLOCKS/ACCESSORIES
SYSTEMS/TOWER CONVERSIONS

AMIGA & PC SUPPORTED
BEGINNERS' SETUP

BUREAU & SCAN SERVICES
FILE CONVERSION
MULTIMEDIA & DESIGN

01328 862693

E-MAIL CHROMANET@AOL.COM
HTTP://MEMBERS.AOL.COM/CHROMANET

Est. 1989
HAREWARE
ONLY!
INDEX ONLY £1
1-3 disks £1.50,
r more ONLY £1.25
FREE
P&P

AMES
OM
p&p
C GAMES
MIGA &
UDE:-
MANIC
BOBBLE
IDIUM
ETC.
OTTER,
AVENUE,
ON32 8QB

MIGA
are
a
disk
538
LY
& CD32's
PANSIONS
TOCK
GATE
E
er

MA
MPUTING
SORIES
VERSIONS
PORTED
TUP
RVICES
ON
ESIGN
2693

PAY BY CREDIT CARD AND GET A FREE CDROM: CALL NOW FOR DETAILS

FORE-MATT
Home Computing

Dept.CU, PO Box 835, Wootton Bassett,
Wiltshire SN4 8RX Tel: 01793 853802

Public Domain/Shareware/CD-ROM/
Commercial Software/Hardware

FREE CATALOGUE DISK

PD / Shareware from only 50p/disk

WINTER SALE

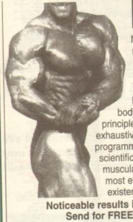
A Whole World of Amiga Software

CDROM				DISK			
Akira	£3.99	Amos PDCD 2	£13.99	Acid Attack	£12.99	Railroad Tycoon	£12.99
Assassins Games 1	£11.99	Animations (Dbl)	£14.99	Air Bus II	£14.99	Roadkill	£4.99
Assassins Games 2	£13.49	Arcade Classics+	£14.99	Approach Trainer	£4.99	Road Rush	£9.99
Assassins Games 3	£16.99	Artworx CD	£8.99	Arcade Action	£12.99	Sensible Soccer 97/97	£19.99
Big Red Adventure	£16.99	BCI Music/Mods	£8.99	Bograts AGA	£12.99	Silent Service II	£14.99
Black Viper	£19.99	Clip Art	£7.99	[illegible] AGA	£16.99	Simon the Sorcerer	£14.99
Cedric	£9.99	Emulators Unlimited	£14.99	Breathless AGA	£12.99	Simon the Sorcerer AGA	£14.99
Computer Pets	£4.99	Encounters UFO	£14.99	Blade	£14.99	Skidmarks	£7.99
Fighting Spirit	£19.99	Epic Encyclopedia	£19.99	Cannon Fodder 2	£8.99	Slamtilt AGA	£24.99
Flyin' High	£19.99	Euro Cd Vol 1	£9.99	Capital Punishment	£24.99	Spherical Worlds	£9.99
Games Delight 2	£19.99	Fonts CD	£8.99	Championship Challenge	£14.99	Sporting Spectacular	£14.99
Gloom	£12.99	Gateway vol. 1	£9.99	Civilization	£12.99	Super Skidmarks	£9.99
Gloom 3	£14.99	Graphic Sensations	£12.99	Colossus Chess	£4.99	Testament	£19.99
Gulp	£2.99	Hottest 6	£16.99	Desert Strike	£9.99	Theme Park	£13.99
Kang Fu	£24.99	Illusions in 3D	£8.99	Dog Fight	£9.99	Theme Park AGA	£13.99
Legends	£19.99	Insight Dinosaurs	£2.99	Dune II	£12.99	Tile Move	£14.99
Nemac IV	£24.99	In-To-The-Net (Dbl)	£9.99	Enemy	£14.99	Time Keepers	£11.99
Pinball Illusions	£11.99	LSD 1,2,3 each	£9.99	Flashback	£14.99	Tiny Toy Adventure	£29.99
Roadkill CD	£14.99	Meeting Pearls	£8.99	F15 Strike Eagle II	£14.99	Tiny Troops	£16.99
Simon the Sorcerer	£14.99	Meeting Pearls 4	£8.99	F19 Stealth Fighter	£14.99	Tommy Gun	£29.99
The Strangers AGA	£19.99	Multimedia Backdrop	£14.99	F117A Nighthawk	£8.99	Touring Challenge	£9.99
Trapped	£16.99	Multimedia Toolkit	£5.99	Gloom AGA	£4.99	UFO	£14.99
Trapped 2	£19.99	Multimedia Toolkit 2	£19.99	Guardian	£4.99	Valhalla 1	£13.99
Uropa 2	£24.99	Network CD	£6.99	Gunship 2000	£14.99	Valhalla 2	£13.99
Vital Lite	£4.99	Network CD 2	£9.99	Hillsea Lido	£12.99	Valhalla 3	£16.99
Wendetta	£19.99	NFA AGA Experience	£9.99	Hugo	£29.99	Virtual Karting AGA	£8.99
17 Bit Phase 4	£7.99	NFA AGA Experience	£9.99	Impossible Mission	£9.99	Watch Tower	£14.99
17 Bit 5th Dimension	£14.99	Octamed 6	£2.99	Jet Pilot	£15.99	XP-8	£8.99
3DCD-1 Objects	£7.99	Octamed Soundstudio	£4.99	Legends	£6.99	Xtreme Racing AGA	£8.99
3DCD-2 Images	£7.99	Oh Yes More Worms	£6.99	Manyk Mayhem	£14.99	Ami-PC Linkup	£17.99
AGA Toolkit 97	£8.99	Pandora's CD	£2.99	Mega Typhoon	£29.99	Blitz Basic 2.1	£19.99
Aminet 9 or 10 each	£6.99	Personal Suite	£4.99	Microprose F1GP	£14.99	Deluxe Paint 5	£19.99
Aminet 13, 14, 15, 16 each	£7.99	Sounds Terrific (Dbl)	£10.99	Minskies	£9.99	Image FX 2.6	£179.99
Aminet 19, 20, 21, 22 each	£10.99	Sounds Terrific 2 (Dbl)	£18.99	Naughty Ones	£4.99	Info Nexus/2	£2.99
Aminet Set 1, 2, 3 each	£15.99	The Learning Curve	£17.99	Overlord	£14.99	MultiMedia Experience	£6.99
Animet Set 4, 5 each	£27.99	Zoom 2	£17.99	Pinball Fantasies	£14.99	Pcx PC Emulator	£49.99

Mega CD Bundle (Demos are Forever/Soundstudio/Scene Storm/Akira/Gulp/
Pandora/Insight Dinosaurs/Golden Games) *£29.99*

3 1/2" Drive Cleaning Kit *£1.99* -- Turbo Joystick *£9.99*
Blank Disks: Grade "A" *30p each* -- Ex S/W House *20p each*

Many more titles in stock *ONLY 50p p&p per order*



BUILD MUSCLES FAST!

NEW! Fastest way to build muscles and strength without weights - EVER! Just 35 minutes daily in privacy of your own home will develop an amazing physique.

MUSCLE DYNAMICS is a new body building system based on principles developed after years of exhaustive research. It is a total exercise programme involving the very latest scientific breakthroughs in the field of muscular development. It is the fastest, most effective way to build muscles in existence.

Noticeable results in 28 days guaranteed.
Send for FREE Information Pack.

MUSCLE DYNAMICS, P.O.BOX 40, GATESHEAD,
TYNE & WARE, NE8 1PD. Tel: 0624 801023 (24 hrs)

MUSCLE DYNAMICS, P.O.BOX 40, GATESHEAD, TYNE & WARE, NE8 1PD
Yes! I want to build muscles fast. Please rush me a FREE information pack!
Name..BLOCK
Address..CAPITALS
....PLEASE
....Postcard.................
(A stamp for reply appreciated)

FREE
GAMES CHEATS
ON ALL ORDERS
FREE
1.4 EMULATOR

P
UNDERGROUND
D

FREE
LIBRARY DISK
ON ALL ORDERS
FREE
POST & PACK

PLATFORM GAMES
☐ 2115 MARIETTO
☐ 001 MAD COW NOT 1.3
☐ 1330 CAPTAIN BONUS
☐ 1445 10 C.W. GAMES
☐ 1553 LANCE-O-LOT
☐ 1462 CHARLIE COOL
☐ 1878 JUMPMAN DELUXE
☐ 2008 A12 KICK IT!
SPACE BLASTERS
☐ 2123 A1200 AMI-BEE
☐ 2137 A1200 ALL-ROX
☐ 2043 STAR-BOY
☐ 911 SOLO ASSAULT
☐ 906 OBLITERATOR
☐ 498 THE LAST REFUGE
☐ 1434 SPACE BLASTER
☐ 1706 THE ASTRO KID
☐ 1855 A12 SPEEDBREAK
☐ 1904 CREEPY CRAWLIE
☐ 1921 WITNESS
☐ 2003 A12 BANANA ISLE
ARCADE GAMES
☐ 2093 A1200 GEENIE
☐ 2085 FISHING FUN
☐ 273 KELLOGS EXPRESS
☐ 1368 ALIENS F.F.
☐ 1338 STRIKE COMMAND
☐ 1500 U.P.D 24 GAMES
☐ 1807 A12 BEASTIES 2
☐ 1880 A12 SLIPSTREAM
☐ 1908 FLY TIGERS
☐ 1948 ANTS-ANTS-ANTS
P.D. VERSIONS
☐ 025 HUNTER PLUS
☐ 815 LEMMINGS PACK
☐ 023 RICK DANGEROUS
☐ 1457 TI-FIGHTERS
☐ 022 THE GODS
☐ 026 ROBOCOP V2
☐ 1702 S.W.O.S MOON
☐ 1778 PINBALL FANTASY
COMBAT GAMES
☐ 941 FATAL BLOWS
☐ 938 MARTIAL SPIRIT
☐ 290 FIGHT WARRIORS
☐ 1238 WEAPON MASTERS
☐ 1428 CYBERGAMES 3DSK
☐ 1548 FIGHT A1200
☐ 1720 A1200 SAMURAI
CLASSIC GAMES
☐ 011 ASTEROIDS
☐ 693 MISSILE COMMAND
☐ 778 OVERLANDER
☐ 692 SPACE INVADERS
☐ 841 COOKIE
☐ 308 DONKEY KONG
DRIVING GAMES
☐ 951 FLAMMING ENGINES
☐ 469 THE ROAD TO HELL
☐ 1417 MANG FENDERS V2
☐ 1466 A12 KNOCK OUT
☐ 1642 A1200 EX RACING
☐ 1705 A12 AER RACERS
☐ 074 F1 EDITOR 96/7
SIMULATORS
☐ 2147 CYBER-PET
☐ 2138 A12 AARDVARK
☐ 926 HELICOPTER
☐ 332 SEALANCE-SUB
☐ 333 BATTLE CARS V2
☐ 1273 A12 TRAIN DRIVER
SPORT GAMES
☐ 1014 CRAZY GOLF
☐ 630 TEN PIN BOWLING
☐ 1171 2 DSK CRS-ANGLER
☐ 1373 ICE HOCKEY
☐ 1317 A12 GON FISHING
☐ 1465 A12 2DSK TENNIS
☐ 1251 TENNIS TOUR
☐ 1630 INTER CRICKET
☐ 1700 GOLF 9 HOLES
HINTS & CHEATS
☐ 418 1000 CHEATS
☐ 931 BACKDOOR V3
☐ 821 PASSWORD MANIA
☐ 813 GAME TAMER V4.5
☐ 820 MEGA CHEATS
☐ 681 SIERRA SOLUTIONS
☐ 1358 GAME SOLUTIONS
☐ 1653 SOLUTIONS V3
☐ 1651 SOLVES 6 DISK
OVER 18 GAMES
☐ 997 2 DSK ADVENT V1
☐ 1001 2 DSK ADVENT V2
☐ 101 TERROR LINER V1
☐ 1081 ADULT TETRIS
☐ 1248 STRIP POKER
☐ 1145 A12 NUMBERS V1
☐ 1335 ADULT DROIDS
☐ 1533 DRAGONS BALL
☐ 1517 ADULT BOMBER
☐ 1654 LEGO BREAKOUT
☐ 1768 4 DSK A12 ADVENT

TETRIS - COLUMNS
☐ 107 TWIN -TRIS TETRIS
☐ 293 DR. MARIO COLMS
☐ 1602 SUPER FOUL EGG
☐ 1627 PILL - MANIA
☐ 1954 A1200 PLUBZ
☐ 2000 A12 WORMTRIS
PAC-MAN GAMES
☐ 1931 A12 PLAY PAC
☐ 1956 JACK-MAN
☐ 1096 PUC MAN
☐ 1138 A12 CYBER MAN
☐ 1648 A12 BOBS LEMON
☐ 230 SUPER PAC-MAN
BREAK-OUT & PONG
☐ 2129 A12 PIV POLATA
☐ 003 MEGABALL V1
☐ 459 MEGABALL V2
☐ 1459 CYBERSPHERE
☐ 559 MEGABALL V3
☐ 1704 BORIS BALL
☐ 2021 BRIK-FIGHTER
BOULDERDASH GAMES
☐ 1527 ICE MINE PRO
☐ 1595 NEW MINES
☐ 1569 BUG MINES
☐ 1572 UNDER MINES
☐ 1573 GOLD MINES
☐ 1577 EMERALD HEAD
☐ 1580 EXPERT MINES
☐ 1582 DENMARK MINES
☐ 1583 STYX MINES
☐ 1892 SPACE MINES
☐ 2013 WONDER MINES
PUB-CLUB GAMES
☐ 2108 A12 SOLO CARDS
☐ 2136 SOV-SLOTS
☐ 2069 BILLYS DARTS
☐ 2032 PRO POKER
☐ 1930 A12 DOMINOES
☐ 1929 A1200 YATZEE
☐ 1304 CHECKERS V2
☐ 222 FRUIT MACHINE
☐ 375 CARDS SOLITAIRE
☐ 1246 AMIGA CRIBBAGE
☐ 1362 PUB DARTS TOUR
☐ 560 WORLD DARTS
☐ 1450 SAT SNOOKER
☐ 1112 A1200 X CARDS
BOARD GAMES
☐ 2151 A1200 JIG SAWS
☐ 2109 MONOPOLY V1.4
☐ 2033 SCRAZZLE
☐ 910 NEW MONOPOLY STAT
☐ 631 SCRABBLE
☐ 476 CHESS GAMES
ADVENTURE GAMES
☐ 116 STAR TREK 2 DISK
☐ 297 NEIGHBOURS 2 DISK
☐ 1671 BREED 1996
☐ 1753 A1200 GLOOM
☐ 1894 TIME RUNNER
☐ 1925 DUNGEONS
STRATEGY GAMES
☐ 876 GLOBAL NUKE WAR
☐ 826 IND-ESPIONAGE
☐ 1182 A12 NIGHTMARE
☐ 1170 A12 LORDS 2 DSK
☐ 1431 UFO UNCLOTHED
☐ 1547 SOLO STAR TREK
PUZZLER GAMES
☐ 2127 COIN-MANIA
☐ 859 10 PUZZLERS
☐ 1550 PUZZLER PITS
☐ 1546 EXPERT BALLS
☐ 1633 THE WOOGLIES
☐ 1765 BRAIN BALLS
MANAGER GAMES
☐ 876 SCOTTISH LEAGUE
☐ 321 AIRPORT
☐ 443 SLAM BALL
☐ 817 BLOOD BALL
☐ 1429 ULTI MANAGER
☐ 1699 PREMIER PICS
☐ 1763 AIR TRAFFIC
☐ 1771 MICRO MART 3
QUIZ GAMES
☐ 2119 CATCH PHRASE
☐ 1031 TREK TRIV 5 DISK
☐ 716 POP MUSIC QUIZ
☐ 462 WHEEL OF FORTUNE
☐ 1597 QUIZ 555
☐ 1683 HOLLYWOOD TRIV
☐ 1670 A12 DEATH ROW
LOGIC GAMES
☐ 1037 MARBLES GAME
☐ 119 DRAGON'S TITLES
☐ 112 DRAGON'S CAVE
☐ 1477 BOMB MANIACS
☐ 1476 MARBEL-LOUS
☐ 1687 TILE MANIA

AMIGA LEISURE
☐ 2135 A12 DIANA 61-97
☐ 205 AMIGA PUNTER
☐ 1210 LOTTO LUNATIC
☐ 1438 A-GENE V5
☐ 1594 LOTTERY SYSTEM
☐ 1682 THE PHYSICIAN
A1200 MEGADEMOS
☐ 2045 ETERNAL 2 DISK
☐ 2083 O SPICE 2 DISK
☐ 2053 TERMINATOR DISK
☐ 1270 DOOM RAVE
☐ 1220 AMIGA JAMMIN
☐ 1165 VENTILATOR
☐ 1685 2 DISK JADE
☐ 1725 DREAM WITH ME
AMIGA MEGADEMOS
☐ 2053 SHED TEARS 2DSK
☐ 460 TEKNO RAVE
☐ 1015 2DSK TAZ QUEEN
☐ 1104 2DSK OXYGENE
☐ 1785 TECHNO TRACKS
☐ 1816 BATMAN 2 DISK
☐ 1985 COLOUR CYCLE
A1200 SLIDE SHOWS
☐ 740 4 DISK MANGA
☐ 1271 PIXEL STORMS
☐ 1193 LEMMINGTONS
☐ 1646 MISS MANGA
☐ 1650 STARFLEET 3DSK
AMIGA SLIDE SHOWS
☐ 2064 A12 PATHFINDER
☐ 2048 FAN-GUIDE 2DSK
☐ 704 REVELATIONS
☐ 061 PAT NAGEL'S GIRLS
☐ 936 AVIATION HISTORY
☐ 1060 5DSK LION KING
☐ 1498 NIGEL MANSELLS
☐ 1472 YABA DABA DO
ARTWORK PACKAGE
☐ 1932 DOODLE PAINT
☐ 063 ULTRAPAINT
☐ 349 SPECTRACOLOUR
☐ 748 ILLUSION PAINT
☐ 1460 A-Z PAINT PAD
☐ 1565 CARTOON STUDIO
☐ 1707 PERFECT PAINT
☐ 1760 JNR PICASSO
ARTWORK PROGRAMS
☐ 2056 ASCI ART PRO
☐ 1299 A12 MAGNI-CAD
☐ 071 GRAPHICS CON KIT
☐ 070 GRAPHIC UTILS
☐ 133 FRAC LAND BUILD
☐ 1026 PICTURE LAB
ANIMATIONS
☐ 084 PUGGS IN SPACE
☐ 651 FAIRLIGHT 242
☐ 831 RED DWARF
☐ 463 MR POTATO HEAD
☐ 347 NEWTEK V3 2 DISK
☐ 187 ANIMATION STUDIO
AMIGA VIDEO
☐ 329 VIDEO INSCRIPT
☐ 790 VIDEOTRACKER 5 DISK
☐ 148 S-MOOVIE
MUSIC MAKERS
☐ 1971 SAMPLE MAKER
☐ 220 FUNK KEYBOARDS
☐ 431 RAVE KEYBOARDS
☐ 202 MED V3.2
☐ 729 DRUM MACHINE
☐ 787 SONIC DRUM KIT
☐ 738 OCTAMED V2
☐ 136 THE ART OF MED
☐ 192 THE COMPOSER
☐ 618 MUSIC DATABASE
☐ 981 AUDIO ENGINEER
☐ 1681 PROTRACKER 3.5
☐ 1791 OCTATUTOR V5
CLASSIC-POP
☐ 201 PIANO CLASSICS
☐ 234 VIVALDI 2 DISK
☐ 342 AMIGA-DEUS
☐ 213 DIGI CONCERT V2
☐ 620 BAGPIPE MUSIC
☐ 248 EXPRESSION V2
☐ 1357 2 MEG DACO VI
☐ 1759 GUITAR BLUES
☐ 1757 HEAVY METAL
☐ 1800 TEKNO MAGE 96
☐ 1968 BEATLE MANIA
SAMPLES - MODS
☐ 2095 TAZ JUNGLE SFX
☐ 660 KORG 01W 8 DISK
☐ 647 SOUND FX 3 DISK
☐ 619 DRUMS 2 DISK
☐ 1666 URBAN 6 DISK
☐ 1588 DANCE 5 DISK
☐ 1258 MOVIE SAMPLES
☐ 1861 MONTY PYTHONS
☐ 1850 ANSWER BACK
☐ 1828 NEW WORMS SFX

AMIGA EMULATION
☐ 423 2 DISK SPECTRUM
☐ 889 PC EM 2 DISK
☐ 327 ACTION REPLAY
☐ 955 DOWN TO A500
☐ 313 UP TO A500 PLUS
☐ 414 UP TO A1200
DISK COPIERS
☐ 2130 DISK CLONER
☐ 2022 COPY & CRACK V4
☐ 727 MULTI TASK (MT)
☐ 158 X.COPY PRO
☐ 325 LOCK PICKER V2
HARD DRIVES
☐ 2089 GAME INSTALL 12
☐ 779 W/B 3 INSTALL
☐ 780 W/B 2 INSTALL
☐ 490 8 DISK MAGIC W/B
☐ 1692 A BACKUP V5
☐ 1674 CD ATAPI
☐ 1775 2 DISK MUI 3.8
☐ 1770 2 DISK ERROR TALK
PRINTING
☐ 243 AWARD MAKER 4 DISK
☐ 065 AMIGA FONT 7 DISK
☐ 100 PRINTER DRIVERS
☐ 048 PRINTING STUDIO
☐ 345 BANNER MAKER
☐ 057 TEXT ENGINE V4
☐ 394 INVOICE PRINT
☐ 749 FORM PRINTER
☐ 1658 CARD AND LABEL
☐ 1842 PRINTMASTER
☐ 2012 FONT EDITOR
AMIGA BUSINESS
☐ 2030 H-MANAGER 2DSK
☐ 832 DATABASES 2 DISK
☐ 082 ACCOUNT MASTER
☐ 470 LITTLE OFFICE
☐ 244 SPREADSHEET
☐ [illegible] UK STD CODES
☐ 1464 DIARY 2000
☐ 1366 AMIBASE V4
☐ 1798 DAILY LIVING
☐ [illegible] NOTEBOOK
COLOUR CLIPART
☐ [illegible] 9 DISK COLOURBRUSH
☐ [illegible] 7 DISK CLIP ART
☐ [illegible] 3 DISK WORLD MAP
MONO CLIP ART
☐ 170 15 DISK PORTFOLIO
☐ [illegible] 7 DISK CLIP ART
AMIGA MODEM
☐ 2087 A-EMAIL V1.4
☐ 702 COMMS TUTORIAL
☐ 413 N-COMMS V3
☐ 1032 MAX BBS PROG
PROGRAMMERS
☐ 288 A-BASIC TUTOR
☐ 306 UNDERSTAND AMOS
☐ 1087 AGA DATATYPES
☐ 1691 NORTH C
☐ 1754 AMIGA DOS [illegible]
DO IT YOURSELF
☐ 2026 PD MANUALS 2DSK
☐ 239 SLIDESHOW MAKER
☐ 808 MAKE A DISK
☐ 242 MENU MAKER
☐ 1903 MAKE A DISK V2
VIRUS CONTROL
☐ 2087 VIRUS Z V1.38
☐ 506 A1200 VIRUS
☐ 180 M.V.K PLUS
AMIGA UTILITIES
☐ 1030 A12 DIONIC TOOLS
☐ 612 4 DISK TOOL KIT
☐ 1629 UN-ARCHIVER
☐ 1983 CRUNCHERS
DISK & SYSTEM
☐ 166 SYSTEM TESTER
☐ 467 FILE UNDELETE
☐ 194 DISK OPTIMISE
☐ 356 ENGINEERS KIT
☐ 245 FIX DISK
☐ 168 HARDWARE MANUAL
☐ 1881 HARDWARE MODS
AMIGA EDUCATION
☐ 2154 WB3 EXPLAINED
☐ 766 GEOGRAPHY
☐ 532 MATHS 5 DISKS
☐ 644 ENGLISH 4 DISK
☐ 486 LANGUAGES 4 DISK
☐ 270 PLANETS 6 DISK
☐ 304 ENGINES 5 DISK
☐ 059 AMIGA TUTORIAL
☐ 1269 DPAINT 4 TUTOR
☐ 937 A1200 / 600 TUTOR
☐ 1361 2 DISK INTERNET
☐ 1362 AMIGA GUIDE
☐ 1982 DYNAMIC [illegible]

DISK COST £1.50 EACH, NO MINIMUM ORDER, ALL VIRUS FREE AND USER FRIEND
All games are on 1 disk and run on all Amiga's unless otherwise stated
PICK AN EXTRA DISK FOR FREE WITH EVERY EIGHT DISKS YOU PURCHASE

UNDERGROUND PD, 54 CARMANIA CLOSE, SHOEBURYNESS, ESSEX SS3 9YZ. TEL: 01702

Name: .... Amiga Model: ....
Address: ....
.... Postcode: ....

35p FUTURE PD

- Highest quality DD disks
- Next day despatch.
- 16,000 titles Inc. Aminet.
- For branded disks add 10p.

1-9=50p 10-39=40p 40+=35p
130 x 10 DISK PACKS - £3.40

10 FREE DISKS voucher with 3 disk catalogue
(free with any order, or send 3 x 1st class stamps)

CHOOSE UP TO 1000 TITLES ON CD AND/OR BACK UP YOUR HARD DRIVE.

ONLY £19.99

Please write for full details

Dept CUF, 12 Ranworth Road, Bramley,
Rotherham, S66 2SN

NORWICH PD

Dept (CU) 43 MOTUM RD, NORWICH, NORFOLK,
NR5 8EH. TEL: 01603 504655
E-MAIL norwichpd@albatross.co.uk

F1 Software & 5D Licenceware

Star Boy (ShootEmUp) £3.99, Any Amiga
Euro Manager (Football Manager) £3.95 A600/A1200
Hilt II (Good RPG) £4.95 any Amiga
Sorefist (BeatEmUp) £3.99 A600/A1200
EdWord Pro V4.1 (word Processor) £3.99 any Amiga

AMIGA CD ROMS

AMINET 10, 12 or 13 £7.99
OCTAMED SOUND STUDIO CD £6.00
SCENE STORM £5.00
AKIRA £5.00
PERSONAL SUITE CD-ROM £9.99
INSIGHT TECHNOLOGY £3.99

All the CD roms below are £2.99 each

INSIGHT DINOSAURS, FireForce, Guardian, PANDORAS CD, GOLDEN GAMES, DEMOS ARE FOREVER, GLOBAL EXPERIANCE, GULP.

Please add .80p P&P per order.
Ring Now for free Catalogue

SELECT SOFTWARE

FREE GIFTS:-

- ☆ 3 FREE disks per £10
- ☆ FREE Disk Boxes
- ☆ FREE spare labels
- ☆ Branded Disks
- ☆ FREE 1st class P&P next day despatch

PHONE FOR FREE CATDISK

- ☆ Amended to work easily for beginners
- ☆ Only best titles & latest versions
- ☆ Guaranteed - No quibble replacements

A1200/A4000
- ☐ Rocketz 2.28 AGA
- ☐ Brain Dead Doom Clone
- ☐ Ampu Worms Clone (2)
- ☐ Ariel Racers Skidmarks (2)
- ☐ Slipstream 3D Game Demo
- ☐ WB3 Beginner Guide
- ☐ HD Click 3
- ☐ SwazBlanker 2.7 AGA
- ☐ RD's Datatypes
- ☐ Iconian 2.98s AGA 90%
- ☐ D.Pacman1.6 AGA 88%
- ☐ D.Galaga 2.6C AGA 100%
- ☐ Diamond Caves Latest (2)
- ☐ Cybertech AGA (2)
- ☐ Klondike AGA Floppy (3)
- ☐ Klondike AGA 4 (4) (hd)
- ☐ Samurai Showdown AGA

WB2+ UTILS
- ☐ IDEFIX 97 latest
- ☐ Image Studio 2.2 (2) (hd) 90%
- ☐ Menus & More 3.2 93%
- ☐ Palette Control Utils
- ☐ Reorg3.11 & Disksalv 2
- ☐ Fiasco2.01 Database (2) 96%
- ☐ Virus Xtruder 3.4 92%
- ☐ Filequest Dopus Clone
- ☐ PowerdataPro HD doubler
- ☐ XPK Libs and Tools
- ☐ Executive 2.1 (2) (hd) 95%
- ☐ MCP Latest (2) 93%
- ☐ Toolsdaemon 2.1a

MUI UTILS (WB2 +)
- ☐ Tool Manager 3 Kit
- ☐ MUI 3.8 and DevKit (2)
- ☐ MUI on floppy-hd not req'd (3)
- ☐ RD Filemanager1.29 84%
- ☐ Daily Backup 2.42
- ☐ Screentab 3.2
- ☐ Start Menu 2
- ☐ Windoze Progs & More
- ☐ RD's MUI Utils 33
- ☐ RD's MUI Utils 34
- ☐ MUI Video Titler 2.1
- ☐ MUI Rexx 2.2 94%

WB2 + GAMES
- ☐ Kick It (90%)
- ☐ MegaTyphoon 91%
- ☐ Statix 89%
- ☐ Psycheual 98%
- ☐ Deluxe Pacman 1.6 88%
- ☐ Rebouldix
- ☐ Slider 92%
- ☐ Torque 87%
- ☐ Deluxe Galaga 2.6 100%

UTILS ETC - ANY 1MB
- ☐ TextEngine 5 Word Pro
- ☐ Snoopdos 3
- ☐ Wordworth Fonts (5)
- ☐ Panasonic Print Driver
- ☐ Star Printer Drivers
- ☐ Pro Printer Drivers

ART, MUSIC ANY 1MB
- ☐ Junior Picasso
- ☐ Disney Colour Clipart (2')
- ☐ Spectrapaint 3.1
- ☐ RD's Sound Samples (3)
- ☐ RD's Instruments (2)
- ☐ Star Trek Rave Demo
- ☐ Octamed v5 (WB2+)

GAMES - ANY 1MB
- ☐ Xmas Kids games (3)
- ☐ Yahtchoo
- ☐ Astro Kid
- ☐ Witness Project X Clone
- ☐ Blasted Shoot em up
- ☐ Dog Fight 1.1
- ☐ Super Foul Egg (Puyo)
- ☐ M&S Tetris Compilation
- ☐ Megaball v4 (3)
- ☐ M&S Puzzlers Comp
- ☐ M&S Blaster Comp
- ☐ Pinball Fantasies Demo
- ☐ Breed 96 SimCity 1.3
- ☐ Total War 1.9
- ☐ Real Chinese Majong
- ☐ Super Skiddy 3 85%
- ☐ Wheel Chair Gladiators
- ☐ Wally World (2)
- ☐ Coarse Fishing (2) 100%
- ☐ Antwars 1.9
- ☐ Cosmic Racer
- ☐ Chaneques (2)
- ☐ M.A.S.H.
- ☐ Kung Fu Charlies
- ☐ Solo Assault

EDUCATIONAL - ANY 1MB
- ☐ Star Trek Guide
- ☐ Star Trek Next Gen Quiz (2)
- ☐ Barney Meets Santa (2)
- ☐ Barney Goes Camping (2)
- ☐ Octamed 5 Tutor (4)

ICONS & BACKGROUNDS
- ☐ Magic WB 2.1 p (2) (WB2+)
- ☐ Magic Workbench 1.3
- ☐ Newicons 3 (2) (WB2+) 90%
- ☐ AES Newicons 4, 5 & 6
- ☐ Newicons Backdrops
- ☐ Magic WB extras 11 (2)
- ☐ Magic WB Backgrounds (2)
- ☐ Rabbits MWB Icons 14
- ☐ Star Trek Magic WB extras
- ☐ Iconographics v3 (3)
- ☐ Iconographics More Icons

ALL DISKS £1 • AMINET from 25p • 10 DISK THEMED PACKS £5 • Cheques payable to M.Wood,
Dept CUS, 12 Ranworth Road, Bramley, Rotherham, S66 2SN ORDERLINE: 01709 530 569

FREE Gerry Broad FREE

AMIGA PUBLIC DOMAIN
EST 1993
ALSO GVB-PD
FREE CATALOGUE DISK

AS LOW AS 50P PER DISK - MINIMUM ORDER £5

FOR A FREE CATALOGUE DISK, PLUS FREE GIFT
20 HALF SIZE DISK LABELS. YES 20 *FREE* LABELS

1000s OF DISKS

PLUS 20 FREE LABELS WITH YOUR FIRST ORDER - SUBJECT TO AVAILABILITY

LEAVE YOUR NAME & ADDRESS ON ANSWER MACHINE. SPEAK SLOWLY & CLEARLY

☎ 01628 636020
Fax: 01628 546996

SEND A SAE TO:
G.V. Broad Enterprises (CU FEB)
43 Badger Close, Maidenhead,
Berkshire, SL6-2TE
e-mail: a2gvbroad@aol.com

The UK's **Biggest Selling** Amiga Magazine

CU AMIGA MAGAZINE

If you want to advertise in a 65mm x 50mm space for *only* £58.30 call Marianna Masters now on 0171 972 6727

PDPOWER 60p per disk

(DEPT CU), P.O Box 1219, Aston, Sheffield S26 2XZ
Mobile: 0374-150972 • email:PDPOW@aol.com

WE STOCK OVER 10,000 DISKS - ADULTS; UTILS; GAMES; EDUCATIONAL; MUSIC AND LOTS MORE TO PICK FROM!!!

COMMERCIAL TITLES NOW IN • COMMERCIAL TITLES NOW IN

£4.99 each plus £1 p&p
- Gloom AGA
- Naughty Ones
- Club & Country
- Watchtower AGA
- Colossus Chess

£7.99 each plus £1 p&p
- Skidmarks
- Approach Trainer
- Legends
- Fears AGA

£9.99 each plus £1 p&p
- Cannon Fodder
- Cannon Fodder 2
- Brian Lara 96
- Touring Challenge
- Virtual Karting
- Super Skidmarks
- Super League Manager
- Minskies
- Euro League Manager
- Exile
- Odyssey
- Super Tennis Champ
- StarLord
- Special Forces
- Dog Fight
- F117A
- Impossible Mission
- Road Rash
- Desert Strike
- PGA Tour Golf
- Wing Commander

£14.99 each plus £1 p&p
- Gloom 3 AGA
- Manyk Mayhem AGA
- PGA Tour Golf+
- Fifa Soccer
- Air Bus II
- Rail Road Tycoon
- Colonization
- B17 Flying Fortress
- Fields of Glory
- UFO
- F19
- F15 II
- Microprose Grand Prix
- Civilistation
- Gunship 2000
- Silent Service II
- Theme Park A500/600
- Theme Park AGA
- Acid Attack AGA
- Arcade Action
- Championship Challenge
- Sporting Spectacular

£19.99 each plus £1 p&p
- Street Racer (Disk or CD)
- D Paint 5 AGA
- Mini Office
- Blitz Basic

ACCESSORIES • ACCESSORIES • ACCESSORIES • ACCESSORIES

MOUSE MATS
only £1.75 inc p&p
HEAD CLEANERS
£2.99 inc p&p
A 600 DUST COVER
only £1.99 inc p&p

NOW IN
SEXY BLACK MICE
only £10.99 inc p&p
NOW IN

MULTICOLOUR LABELS
£2.50 per 100 inc p&p
£6.99 per 500 inc p&p
£10.99 per 1000 inc p&p

SPEND £10 or more on PD not inc p+p (this offer does not include accessories for Commercial games) and pick ONE of the following FREE, Headcleaner, 100 Labels, or a Mousemat for only 50p. This offer only applies to NEW customers ordering from this ADVERT. This AMAZING offer closes 28th Feb 97.

* BE SURE TO ASK FOR ABOVE OFFER WHEN MAKING YOUR PURCHASES! - OR MISS OUT!!

PLEASE MAKE CHEQUES/P.O.s PAYABLE TO R. LLOYD FOR ORDERS OF TWO POUNDS OR BELOW. WE ACCEPT STAMPS.

WE NOW STOCK OVER 50 COMMERCIAL TITLES FROM ONLY £4.99

BUY 10 DISKS PICK 1 DISK FREE FOR ANY ORDER PLEASE ADD 75P p+p

***FREE* CATALOGUE *FREE* GAME *FREE* COPIER** *of our choice*
Freebies sent out with all first time orders, or send a S.A.E. to the above address

ADULTS ONLY
Please state over 18
Adult Adv 1 (2)
Adult Adv 2 (2)
Adult Adv 3 AGA
Bomb X
Page 3 Girls
Kathy LLoyd
Flintstones 2Meg
The Bride AGA
Nursery Rhymes AGA
Fairytales AGA
Flight Fantasy AGA
Cruelist Blow AGA
Good Vibrations AGA
Erotica-1 AGA (3)
Cal Girls AGA (2)
Utopia Cartoons 1.3K
Exposed 1.3K (4)
Strip Pot AGA (2)
Classic Pin Ups AGA (3)
Drink and Drown
Madonna Sex (3)
Slayer Steve's (3)
Hot Girls AGA (2)
La Toya AGA (2)
Sexy stars AGA (3)
Danni Minogue AGA (2)
Pin Ups AGA (2)
Big bust girls AGA (10)
Asian babes AGA
Babes bottoms AGA(4)
Wet babes AGA (2)
Sultry babes AGA(2)
Drew Barrymore AGA (3)
Red Hot and Irish (2)
Strip Poker (7)
Sharon Stone AGA (2)
Luvly Ladies AGA 2 (5)
Luvly Ladies AGA 1 (5)
Big Men AGA (5)
"Sexy" pack AGA (15)
Pussy pack #1 AGA (20)
Pussy pack #2 AGA (25)
Pussy pack #3 AGA (20)
Pussy pack #4 AGA (15)
Susie Boobies AGA
La Toya AGA (2)
Wendy Whoppers AGA
J.A. Bust AGA
Luvly Ladies AGA 4 (5)
Penthouse Hot No's WB 2+
Pam Barbwire AGA
Luvly Ladies AGA 3 (5)
Die Fickinger
Best of the Breast AGA (5)
Mayfair Beauties AGA (2)
Erection Collection AGA (2)
Private Collection AGA (2)
Tina Small
Big Boobs #1
Big Boobs #2
Tetris Sex Special
Global Overdose
Putty Test
Wheel of Fortune
Adult Jigsaws
Pam Anderson #1 WB2+
Pam Anderson #2 WB2+
Mega Maid
Hustler Girls #1 (2)
Showering Girls
Manga Pussy Pack AGA (27)
Sex Puzzle
Escort & Fiesta
Manga-X #1 WB2+
Manga-X #2 WB2+

GAMES
Captain Bonus
Charlie J Cool WB2+
Birdies WB+
Kick It AGA
Astro Kid
Blasted
Alien F.F WB2+
Kellogs Express
Slipstream AGA
Xmas Theme Park
Int Cricket
Death Row Quiz
Scrabble
F.N. Pool WB2+
S.N. Snooker WB2+
Flyin' Tigers WB2+
Monsters AGA
Booze-o-Meter
Intermercs AGA
Ami Tank
Marryampics WB2+
Fishing Fun WB2+
Hot Columns AGA
Curse of PC's WB2+
Law Mine
Cybersphere
Bugmine 2
Bugmine 3
Wordchamp AGA HD
Dogfight V1.1 WB2+
Yatcy WB2+
Space Invasion II
Death Row Quiz WB2+
Target Shoot WB2+
Battleships
Eurotrotter WB2+
Pacman 96 AGA
Playpac AGA
Power Tetris
Physco Zone
Super Ballz AGA
Power Pacman WB2+
Gal Empires WB2+ (2)
Bomber 2000 3D
Seven Realms ADV WB2+
Sheep Shooter WB2+
Electric Trainset
Jet Set Willy 97 WB2+
Rockstar WB2+
W.O.F Football
Hit Tiles II WB2+
Captain Custard WB2+
Nerdkill AGA
Logic AGA
Flight Control WB2+
Dr Mario
Wibbly World Giddy
Holy Grail (txt adv)
Pro-Bingo
Gone Fishing
Donkey Kong
Donkey Kong AGA
Lego Tetris
Megaball
Megaball v2
Card Games
Arcade Classics
Startrek (2)
Knightwoode (adv)
Ant Wars (2)
The Shepherd
2 Unlimited Tetris
Raise the Titanic
Scott Footie Manager
18 Hole Golf (2)
Red Dwarf Trivia 6 WB2+
Speccy Pack (34)
Bomb Jacky
Harry the Haddock
Supermega Fruits
Amiga Columns
Starbase 13 (2) (adv)
Top of the League
Amos Loadsamoney
Dominoes
Roulette
War (strategy)
Red Dwarf Trivia
Spellfire
Pacman 3D WB2+
Breaking Heads WB2+ (6)
100 Games Pack (7)
Boardgames Pack (5)
Card Games Pack (5)
Coarse Angler (2)
Pub Darts
21 Games not AGA
Assassins Games 1-255
Games Galore (18)
Games Galore AGA (18)
Funpack Games (28)
Go Kart Mania WB2+
Gunfighter
Elevators
Duckblast
Bully's Darts
Dungeon Hero
Shangai Collection
Breed 96
Fruitmania
Mr Men Olympics (2)
Soudbuster
Circus
Fishy Fishy
Quiksilva WB2+

EDUCATIONAL
Little IMPS WB2+
Ask Me Another
Discworld Trivia AGA
Electronics Vs.0 WB2+ (3)
Alpha Recognition WB2+
Titanic II WB2+ (2)
Amos Language Tutor
Highway Code
Kids Stuff
Kids Disks #1
Kids Disks #2
Kids Disks #3
A-Z Paintpot
Kids DTP (2)
Paint It
Kids Disks #4
Kids Disks #4
Fireworks Alphabet
Communicate
GCSE Maths
GCSE Maths Exam
Artistix
Animal Land #1
Learn in Space
World War II
World Geography
Kids Songs #2
Maths Adventure
Amiga Beginner
Read & Learn #1 (2)
Kids Disks #6
World History Book
GB Almanac
World Almanac
Kids Paint
Learn & Play #2 (2)
Typing Tutor
Maths Drill
Match with Humpty
Illusions
Wordplay
Maths Master
Count & Spell
Kids Disks #7
Science (4)
Colour It
D.Paint Tutor
D.Paint Guide
Guide to the Net
Weather Guide (3)
Tell the Time
I.Q. Test
Rock-A-Doodle
Fellguity
My First Pony (2)
Basic Amiga Tutor
Tarot II (2)
Error Info
Turntables WB2+
Steam Engine
Petrol Engine
Gas Turbine Engine
Stirling Engine
Revision Master
D Paint 4 Buddy (2)
Battle of Britain (2)

BUSINESS
Asi Label Printer
Amiga Fox DTP
Qbase & Spread
QED
Textplus V3
Visicalc
Business Letters
Text Engine V3.0
Amibase Pro
Forms R Unlimited
Last Will & Test
Edword
Little Office
Address Print
Easycalc
Personal Diary
On Form V1.1
Dear Diary
Asi Office Helper
Account Master V3
Home Accountant

UTILITIES
PM3 Editor
Magic WB V2.1
A1200 H/D Prep
Menumaster V3
Football Icons
Amigados Tutorial
100 Printer Drives
The Grinder
Font Farm (5)
Blue Rose Fonts
Citizen Drivers
A600 H/D Prep
Award Maker
Lockpick V2
RD Prep
Disk Repair Kit
Freepaint
Resume Writer V3
H/D Stacker
H/D Game Install V2
Wordsworth Fonts (33)
Sleepless Nights
The Prophecy
WB2 Emulator
ASI Disk Helper #1
ASI Disk Helper #2
ASI Multiprint #3
ASI Multiprint #4
Home Inv Manager
Icon Manager
Virus Killers #4 (2)
Coppiers Unlimited (2)
Cruch Mania (2)
Hard Disk Tools #2 (3)
Adobe Fonts (15)
Mixed Imagine Objects (9)
Startrek Database (6)
(H/D reqd)
Mannys Printer Drives
HP600 Printer Drives

MISCELLANEOUS
Backdoor V2.81
Cheats Disk 5
100 Demo Pack (6)
O.J Simpson
King James Bible (4)
Mystery of Runes WB2+
Magic Tricks
Asgards Cheats (3)
Star Trek VoyageAGA
Cult T.V. Debase II (2)
Games Help Disk
Nostromo Cheats
UFO Encounters (6)
Cheatlist V3.06 (2)
Startrek TNG (2)
UFO The Truth (2)
X-Files Guide
Mega Cheats
Dr Who 30thWB2+(5)
Aliens Multimedia AGA(9)
U.F.O. (2)
Alternative Science (3)
Amiga Beginner (5)
Red Dwarf Mag #1

MUSIC
Tiffany
Flash Gordon (2)
Bangles
Popeye N B/Boys
I'm Too Sexy (2)
Doctor in the Tardis
Pet Shop Boys
Drums and Pipes
Joe Le Taxi
Music Box
Crossing over WB2+
Sonic Drum Kit V2.1
Startrek Themes (2)
Jesus on E's (2)
Friends of Paula (6)
Modulation (10)
House Samples (3)
Rock Mods (5)

CLIPART
Weddings (2)
Houses (2)
Religious (3)
Men (2)
Women (2)
Kids (2)
Punch (3)
Schools (2)
Banners (2)
Food (2)
Borders (2)
Teddy Bears (2)
Travel (2)
Beast & Myths (3)
Transport (3)
Astrology (2)
Aircraft (3)
Military (10)
Xmas (5)
Lion Kings (3)
Buildings (5)
Maps (10)
Birds (8)
Dogs (8)
Fish (4)
Flowers (11)
Horses (2)
Insects (4)
Mammals (8)
Prehistoric (2)
Reptiles (3)
Trees (6)
Vegetables (4)
Actors
Disney Clips

KLONDIKE A1200 ONLY
Klondike AGA (3)
Klondike II H.D.REQ (3)

CARD SETS FOR KLONDIKE
Cindy Crawford
Star Trek
Dr.Who
Star Trek TNG
Return of the Jedi
Empire Strikes Back
Star Wars
Space Cards
Pretty Woman
N.Mare B4 Xmas
Pam Anderson
Hired Girls (Adults)
X-Dos (Adults)
Erotica (Adults)
Venus (Adults)
Voyager
Busom (Adults)
Extasy (Adults)
Anna Nicole (Adults)
Babylon 5
Bathing Beauties 1
Batman-Phantasm
Batman Forever
Batman & Robin
Batman and Anim
Beauty (Adults)
Beavis & Butthead
Big Baps 1 (Adults)
Black Adder 1
Black Adder 2
Body Shop 1 (Adults)
Body Shop 2 (Adults)
Body Shop 3 (Adults)
Busen (Adults)
Cameron Diaz
Disney
Deep Space 9
Helena Christenson 1
Helena Christenson 2
Manga Mania X (Adults)
Female (Adults)
Jennifer Aniston

AGA = 1200 only WB2+ = Not A500 All titles are on ONE disk unless otherwise stated in brackets.
This is only a small selection thats available from US - LOTS, LOTS, LOTS MORE AVAILABLE!

Next Month

Quake

It exists! Quake is finally coming to the Amiga courtesy of ClickBOOM, and you can find out all about it exclusively in the next issue of CU Amiga Magazine. Along with a major preview we'll also have a playable demo on the CD! Promising everything that made the PC version such a hit, it looks like taking Amiga gaming into a whole new dimension.

Only in CU Amiga – March issue on sale 12th February

Calling all user groups!

Do you run an Amiga user group? If so we want to hear from you.

We're starting up a new user group directory, aimed to help you attract more members and direct lost souls to local like-minded enthusiasts.

Our aim is to compile a database of Amiga user groups from all over the world. Once we've done that, we'll publish and update it each month in these pages of CU Amiga. Assuming we get enough returns in time, we'll print the first listing in the April 1998 issue of CU Amiga. If you'd like your club or user group to be included, simply fill in the form below as fully as you can (all supplied information will be published) and send it to the address below:

User groups
CU Amiga
37-39 Millharbour
Isle of Dogs
London
E14 9TZ

Alternatively fax it to 0171 972 6755 or use the online version of the form which can be accessed from our web site at www.cu-amiga.co.uk. This service is completely free of charge.

`Please include my Amiga user group in your monthly listings.`

General location ____________________

Tel: (specify suitable hours/days) ____________________

Postal address: ____________________

____

Details: (eg. meeting times and places, services offered etc) ____________________

____

Group name ____________________

E-mail: ____________________

Web site: ____________________

Contact name: ____________________

Prefered contact method: (please tick)

☐ **Post** ☐ **Email** ☐ **Phone**

Q&A

Never mind how baffling your technical problems are, put them to our panel of experts and they'll do their utmost to astound you, with in-depth knowledge and solutions. Don't forget to give us as much details on your systems and problems as possible.

Logos

Mysteries and meanings...

WORKBENCH	Solutions to those everyday troubles with your Workbench.
EXPANSION	If you need help getting more from your Amiga, just ask!
COMMS	All your Internet and general comms problems swiftly solved.
SOUND	Trouble making your Amiga sing? We've got the answers here.
HARDWARE	Technical matters beyond the scope of plug-ins and plug-ons.
SOFTWARE	Answers to queries on particular pieces of software.
HELP	General queries which just don't seem to fit in anywhere else.
CD-ROM	Specific help with CD-ROM solutions and driver problems.
GRAPHICS	Problems with art and design? Help and advice is at hand.
PERIPHERALS	Printers, monitors, we'll solve your peripheral blues for you.

Bigtime upgrades

I am thinking of upgrading my computer BIG-TIME!! I want a PPC board really badly, and to put my beloved A1200 in a nice big tower case. Unfortunately I missed your Amiga tower series so I've had to back order them.

I seem to be quite lucky with upgrades at the moment. My friend sold me his A1200 for £50 with T.V. So I put my A500 under my bed and forgot about it. Later a P.C. owning friend of mine gave me a 540Mb 3.5" HD for £15!! However, I still yearn for more power. I was thinking about upgrading to a 1230-IV 50MHz board but having thought more carefully about it I want to go the whole hog and completely transform my machine.

I have access to a PC midi tower and some memory SIMMs and I am not afraid of a little screwdriver work. So here are the inevitable questions:

1. Does the Z3 board from Blittersoft make the A1200 into as near to an A4000 as I'm going to get without shelling out for one? ie; Can I put a PowerPC 604e accelerator board on the A4000 CPU slot and use the Zorro III slots and other goodies?

2. If I use a PC monitor and the correct adaptor will I be able to use all screen modes without flicker or do I need to get a graphics card with scan doubling capability? If so, which monitor would you recommend?

3. What is the best option for external keyboard? Should I buy an A4000 keyboard or should I get a case for my A1200 one? Will I need an adaptor either way?

Any help you could give would be greatly appreciated. Well I think that's it... Oh no, one more thing. I won't hear a word said against PC 'owners! Why not, I hear you cry!

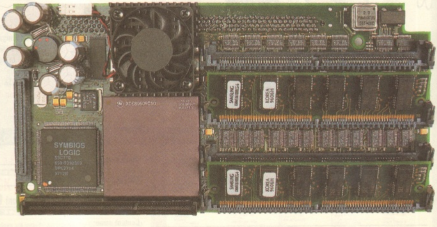
Well if you can befriend one of them who is a constant upgrader you can persuade them to sell (or give you) the parts they remove. 16 speed CD-ROM here I come!

Nick, Stafford.

Hey, you like your exclamation marks, don't you!!

1. In theory, yes. We are still waiting for one of these boards to be sent to us, but no luck yet. It does indeed promise to take A4000 style accelerators and Zorro 3 cards, but how well we cannot say. We've seen them running PPC cards and Cybervision 64s very nicely, if this is the hardware you are after then you should be fine. Other boards may not be so compatible. As for whether the Zorro 3 implementation runs as fast or as compliant as it does on an A4000, probably not but we can't say for sure until we run some tests on it. However yes, it is as close to an A4000 as you will get without buying one.

2. Yes, you will want a scan doubler. Normally these connect to the video socket on an A4000, but the Micronik boards have a problematic video socket. We recommend you either get an external scan doubler or a graphics card with a passthrough adaptor. With this kind of set-up, an SVGA



▲ A PPC card from phase 5, this one designed for A4000s – or any other machine with an A4000 processor slot, like the Micronik 1500.

Tech Tips: Cheap HD floppy

Richard Hodger of Digital Corruption software sent us an excellent tip for people who are interested in using gcr.device (aminet/hard/hack/hidensity.lha or CUCD 16) to give their Amiga the facility for HD disks. He tells us: "I just thought I'd let you in on a little secret that no-one else seems to want to tell you.

"This is mainly of use for people who bought Tower systems, but didn't have a face-plate for a floppy drive. An Amiga compatible high-density drive (formats to 1.5Mb) is either a Panasonic JU-257A605P or JU-257A606P. These are low-cost and can be bought as a PC drive with a Face-plate! I have successfully jury-rigged one (that I borrowed from work) into an external-drive's case, it works fine." There is a minor problem which is that these drives were designed to be multiformat, and in their infinite wisdom Panasonic hardwired the switches. PC floppies have the diskchange line on pin 34 while Amigas have Diskchange on pin 2 and ready on pin 34.

PC floppy drives also have their drive select set to 1 – df0: should have this set to 0. In other words, you might find yourself with a less than 100% compatible drive unless you make sure that you get one which is configured for the Amiga pin out. Fortunately, Richard tells us that Analogic sell these as a replacement mechanism. £25 for a HD floppy drive anyone? Call Analogic on (+44 (0)181 546 9575 and thank Richard for a great tip!

monitor will do. Iyiama are an excellent if slightly pricey monitor, Smile are a good budget range.

3. Blittersoft (+44 (0)1908 261466) will sell you a Micronik keyboard adaptor which will accept either Amiga or PC keyboards. You can either find yourself an A4000 keyboard or buy a £40 kit from Blittersoft to put your A1200 keyboard into a keyboard case. However as very good quality PC keyboards can be bought for around a tenner, we would recommend getting yourself one of those instead. Ateo Concepts' PC keyboard interface is probably still the best we've tried, give them a call on (+44 (0)1705 790211).

Beer Budget A2000

I wondered if you'd like to do a lower budget version of your advice on expanding an A2000 (Nov, p97).

B is for B2000, and I have one (it used to be an A1500, but the black sticker was ugly) – one of the last of the OS1.3s.

It came with 1 meg Chip RAM, and I have fitted SuperDenise, a GVP SCSI controller with 8 megs of Fast RAM, hooked up to the 50 meg HD mounted on it (50 megs was a lot in those days), and a fourth-hand 320 meg 5.25" full height drive, which takes up the rest of the space in the case. Oh, and it's got a 2.04 ROM, which doesn't do much but RAM-load 3.0 from the HD (sshh!).

I sold my A500 and bought an A2000 because I believed Commodore when they said "Whatever happens in the future fits in here", and that's sort-of true, so long as you don't mind Zorro II instead of Zorro III.

The trouble is, I'm a student, and students have no money. I have been saving up, and can now afford to spend about £250-£300 on my financially neglected computer. Am I right to think the highest priority must be a CPU accelerator, because all the other fun stuff, like a graphics card, a high-speed serial card, and maybe a CD drive wouldn't be that much good without it.

And it's silly to have more CPU power in your printer than in the computer, especially when PageStream can take ten minutes to render a page at 300dpi.

You can't get 030 cards any more, so is £250 for a Blizzard 2040/40 card a good deal, or would I do better to hold on for PowerPC cards to get cheaper (040/25s were two grand when they were new) or even wait and see if I can get a new machine (an A\Box?) when they become available? Is it wiser to plan for a 68K accelerator and a conventional graphics card, or go for PPC and hope for an A2000 version of BlizzardVision?

I mainly use my machine for email and writing essays, but if it were more powerful, I'd like to use it for more exciting (mainly net-related) things.

In particular, I'd like it to be more useable as an X-terminal for the university mainframe (free Internet connections are great); at the moment, it can't even cope with running the (56K) modem at over 19200baud. What do you recommend?

Duncan Gibb, Edinburgh

OK then! Your budget for expansion is tight, but never say that miracles can't be worked.

As you rightly said, number 1 priority is the CPU. Forget PPC, that will be way over your budget for a while yet. In fact, I would suggest you use one of the uni computers to check out http://thunderstorms.org/AmiBench where you can post or read adverts for second hand amiga gear. The £250 phase5 card is excellent, but you should be able to get something similar for a fair amount less.

A CD-ROM drive is a must – they are far too useful these days not to get one. A SCSI internal device will cost you very little, anywhere from £35 up. Graphics cards are not necessarily out of your reach either, Blittersoft (+44 (0)1908 261466) sell the Picasso 2 for £129.95 new, or try AmiBench for that too.

Faster serial can be done, although it isn't amazingly cheap. Call Active on (+44 (0)1325 352260 and ask about the £80 Hypercom3Z. This has a fast parallel port as well so your printer problems will be solved too.

A quick calculation says the graphics card, the Hypercom and the CD-ROM would set you back a total of under £250 new. That doesn't leave much room for an accelerator and RAM, so you'll have to prioritise your choices – or stretch your student loan a little further!

Bunch of Questions

Hi. I have a bunch of questions.

1. I have an ICS tower for my A1200 with Blittersofts Zorro 3 board. Is it possible to use a Cyberstorm 604e 200MHz PPC with 060 with it. I heard they are only for A4000s.

2. Will a Cybervision PPC work with it ?

3. Where can I get one of the CD32 joypads that have all six buttons in the same place (not with two on the top).

4. Why when I tried to buy a new 060 (the ones with the new mask revision), did some bloke insist that the chips were still the same as the old ones, and that you couldn't get away with overclocking to 66MHz or above.

He also went on to add that the reviews of the new 66MHz 060s were dodgy, biased and he said he didn't trust them ! Is any of this true. (The advert was from your mag.)

5. What happened to the A1200 XL all those years ago.

6. Why has David Pleasance turned into the moody alcoholic looking east end market trader at all the Amiga shows in England ?

7. Is a 'Catweasel' a real animal ? Cheers, I hope you can answer these questions.

Mat Fenton, email

1. Yes, you can. the Micronik Zorro 3 board has an A4000 style accelerator slot.

2. In theory there should be no problem whatsoever, on the hand Cybervision PPC isn't out yet, so we can't be 100% sure.

3. Never heard of them. Maybe one of our readers can help you?

4. Presumably this "person" you spoke to sells a board which doesn't run at 66MHz? He thought you should buy his instead, Hmm? Right... Did he give any reason why he thought the review was dodgy or biased?

We have absolutely no biases towards any software or hardware companies. Why would we? On the other hand it is not uncommon to find retailers biased against products stocked by rival retailers. Who do you believe, us who have the advantage of having actually used

An A2000. Old, but give it some expansion and it's still bloody good.

▲ **A tower case like this one is the ideal way of connecting a CD-ROM drive.**

the product and seeing it running perfectly for a couple of months and no commercial interest, or someone who's never tried the board and wants your money?

In short, they were talking out of their backsides.

5. Good question. We never saw one.

6. David Pleasance has been moping around ever since his girlfriend left him for a large German with a wad of cash.

7. Ask a hundred zoologists this question and they'll all have a different answer. This question has puzzled the sages for centuries.

Multimedia confusion!

I'm currently on an MM course at Henley College, Coventry and am investigating an Amiga purchase as a WIN95 alternative for graphics etc and intend downloading to video tape. Is this a built in facility with all Amiga's A1200+ ? I don't necessarily need high-spec (such as an A4000) as I'm not in corporate business. If not I would need to know what cards are available and whether any allow recording from computer at 'long play' rate.

I Intend on using a TV for the VCR display, but am looking at 17" monitor for my existing PC and also the Amiga when required (rather than buying Amiga specific monitor as well) so I'm investigating how to fit graphics card to Amiga and link to PC. Keep the info coming in your mag won't you. I Realise you are probably inundated with queries and hope the queue is not into '98 already!

PS: I'm confused re: FAQ Sept – As I understand, a basic A1200 is s.l.o.w so how come a fast Pentium is required to emulate one? Are A1200s actually a lot faster than I give credit for or is it the emulator which dictates the speed?

Jill Daniels, Coventry

On the back of the A1200 is a small round plug socket marked RF out. This is an absolutely standard television aerial socket. Plug an aerial lead from this into the back of your A1200 and you can plug it into a TV to use it as a monitor or into the back of a VCR and record the Amiga's output. Great, huh?

The thing to watch out for is that this will only work if the Amiga is displaying in PAL mode. Other modes run at different frequencies than TVs or videos. Most of the productivity modes of the Amiga A1200 will display on a PC monitor, but the PAL modes won't unless you get yourself something called a scan doubler.

As for why emulators run so slowly, it is because an emulator has to translate the programmes on the fly. Think about it this way: if you want to read a book in a language you don't know, it will take a long time to read even if you have a translation dictionary. As for the queue, if we answered Q&As on a first come first serve basis, you'd have to wait until about 2120 AD for your answer. We don't answer them all 'cos there isn't enough space or enough time.

We select letters based on how useful the answers would be to our readers in general, how interesting the question is, and how easy it is to get it onto the page – ie; literate, concise e-mails or letters on disk almost always get in, rambling, hard to read handwriting almost never does.

Tech Tips: Connecting a CD ROM drive

Here at CU we don't think anyone should have to miss out on the CD-ROM revolution, so here is the guide to the cheapest possible way to get yourself a CD-ROM drive.

1. Buy an internal IDE CD-ROM drive which is 100% ATAPI. Shop around, slower drives are stupidly cheap as end of line stocks. 2 speed drives have been seen for as little as £16!

2. Buy yourself the software. IDEFix '97 is current leader of the pack if you are willing to put up with nagging requesters until you pay the registration fee, alternatively go for AmiCDFS. Both are available for a pittance from any PD library.

3. Find power for the drive. If your A1200 or A600 power supply is reasonably beefy and unstressed, then you can take power from this, look at solution a. If it isn't, look at solution b.

3a. Use the header on the A1200 motherboard which the floppy drive is connected to. The CD-ROM uses larger plugs, but only the size is different. Any computer parts supplier can sell you a cable which splits a CD-ROM style (3.5") power connecter to two floppy disk style (2.5") connectors. One small connector goes to the floppy, one to the motherboard. The big connector goes to the CD-ROM drive.

3b. The CD-ROM drive can be powered very easily from a PC case power supply. They have connectors which will slot straight into the CD-ROM drive. Take one from an old second hand case, or buy one new, they cost about £15. Better, buy yourself a mini tower case, it will house your CD-ROM drive more cleanly and gives you a convenient switch. If you do power your CD-ROM drive separately from your Amiga, switch on the CD-ROM drive first!

4. Set the jumpers. At the back of the CD-ROM drive there are a couple of jumper switches – pins short circuited together with a small metallic clip – which specify the device as being either master or slave. Your hard drive should be master, your CD-ROM should be slave.

5. Connect the CD-ROM drive to your Amiga with an IDE cable. The important thing to remember is that the side of the ribbon cable with a stripe down it should connect to pin 1 of everything you plug it in to. If your Amiga fails to boot, you may have an IDE device plugged in the wrong way.

Note that the IDE connector on an A1200/A600 is 44 pin, while your CD-ROM drive is 40 pin. An unfortunate oversight on Commodore's part when they designed the machine. You will need to buy a special adaptor cable – if you have a 3.5" hard drive, you'll have one already.

You will also need to make sure the cable has three connectors on it, one for the CD-ROM, once for the hard drive and one to connect to the motherboard. Phone your favourite Amiga dealer, this is a specialist part.

6. Power up and install the software, following the instructions which come on the disk.

7. Enjoy all the best new games, applications and compilations. You'll never look back! Total outlay varies depending on the details you employ, but this can set you back as little as £30-£40 if you shop around!

DIY suppliers:

Eyetech	**01642 713185**
Blittersoft	**01908 261466**
Maplin Electronics	**01702 554000**

until
nswer.
'cos
or

d on how
d be to
ow inter-
d how
he page –
ils or let-
ys get in,
andwriting

arately
n on the

t the
ve there
witches
gether
p – which
ing
Your hard
your CD-
OM drive
DE cable.
remem-
he ribbon
n it
of every-
If your
u may
gged in
onnector
4 pin,
ive is 40
ersight on
en they
You will
daptor
5" hard
already.
o make
e connec-
CD-ROM,
and one
herboard.
Amiga
list part.
stall the
e instruc-
the disk.
t new
nd compi-
ok back!
pending on
y, but this
ttle as £30-
d!

3185
1908 261466
1702 554000

E is for... 'Everything you could ever think of that's Amiga related, or just about...'

This month John Kennedy gets his gnarly old teeth into all things E. 'Ere, got any E's John?

E is for...

Echo
An AmigaDOS command which copies, or echoes, text to the screen. It's useful in scripts to pass information to the user, so they know what is happening. The text to be displayed is included in quotation marks, as in ECHO "Hello, World!"

ECS
The Enhanced Chip Set. Before AGA, came ECS and we all thought it was wonderful.

It amounted to some new obscure screen modes and more Chip RAM. Rumour has it that the ECS was Commodore's first chipset in such a long time because they had actually lost the plans to the original, and so the ECS was released as a test to see if they had it right. ECS appeared in the A500plus and A600.

ED
The person in charge of the magazine, and also the text editing program supplied with AmigaDOS.

Ed has grown into something of a monster, with full ARexx support but it still isn't much fun. Most serious users replace it with GoldEd or Cygnus Ed as soon as they realise what they are doing.

Edit
If you thought ED was bad, Edit is much, much worse.

Edit is a command line text editor, which means it works only a line at a time.

It was extremely practical back in the good old days of terminals connected to mainframe computers – and you can use it over serial links if you really want to – but it's best ignored nowadays in these enlightened times of Windows, Icons, Menus and Pointers.

Else
An AmigaDOS scripting command, optionally used in conjunction with an IF/ENDIF construct to move the flow of control to another part of a script when the original condition is false.

Here's an example script which demonstrates it in action. This will only work in a file, not typed at the Shell.

```
IF EXISTS ram:env
ECHO "Ram Env found"
ELSE
ECHO "Ram Env not found"
ENDIF
```

Emerald
One of the standard fonts supplied with Workbench. One of the ugliest too.

Empty Trash
The Amiga has a trashcan icon, where unwanted files can be stored. It's an idea pinched directly from the Apple Mac, although the manner in which it is implemented makes it almost useless.

There is a menu option from the Workbench screen called "Empty Trash", but you will probably never use it.

EndCLI
An AmigaDOS command which closes the current Shell window. Identical to EndShell for all intents and purposes.

EndIf
Used to terminate and IF structure within an AmigaDOS script. See Else for more details.

EndShell
See EndCLI.

EndSkip
AmigaDOS scripts can become quite complicated, and it is sometimes necessary to avoid entire sections of commands.

This is done by "skipping" them with the Skip command. The EndSkip command is inserted at the end of a block. Yes, it is pretty messy.

Env
A directory in RAM disk which stores information such as settings for various applications.

The information is stored in Env-Archive, but copied to Env in RAM at booting time. This makes it faster for applications to access it.

EpsonX/Q
Printer drivers. Epson is such a big name that many printers offer Epson compatible printer modes. If you simply cannot get a printer to work no matter what you do, try setting it up in Epson mode and using one of these drivers.

Escape Sequence
For historical reasons, certain sequences of characters are called "Escape Sequences" and generate certain actions in terminals and shells.

The actions aren't terribly exciting, and are really limited to changing the colour of the text or clearing a window. They can occasionally be useful.

Euro36/72
Two screen modes present with the AGA chipset.

Sometimes Euro72 is useful when trying to persuade a PC style SVGA monitor to work with the Amiga.

Eval
An AmigaDOS command which is short for "Evaluate". When passed an argument, it tries to "work it out", and so it can do sums, convert hexadecimal numbers.

It's handy for doing quick sums at the Shell, or when writing stupidly complicated scripts which need variables updating.

Exchange
The Commodity Exchange program is a useful little utility which keeps an eye on any other Commodity utilities currently running.

Exchange can kill these uti ties, or force them to open up their user interface.

Execute
An AmigaDOS command which causes text files to be loaded and run as AmigaDOS scripts.

Without execute there is n way to deal with text files as anything other than text files. An execute is automatically performed on the Startup-Sequence file when the Amig boots up.

Exists
Used by AmigaDOS scripts to test if something is really present or not. See the definition of Else for an example.

Expansion
A drawer on the Workbench which was occasionally used by hardware to store drivers.

Shouldn't be required from Workbench 2 and onwards.

Extended Selection
Selecting more than one icon at a time.

You can do this by holding down the shift-key when clic ing on icons, or when draggi the mouse around the deskt with the left button held dow

Useful for copying a large number of files at a time.

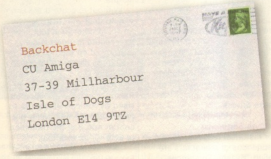
Extra Halfbright
A graphics mode present on the original graphics chipset.

In those days, we were li ited to 32 colour on screen a once, or HAM mode which squeezed out 1024 colours with some severe limitations

Halfbright gave us 64 colours, by creating a secon set of 32 with half the inten of the first. Used in some games and art programs, bu generally considered too mu hassle.

Backchat

We shout the odds all through the magazine every month. Now it's your turn. Write or preferably e-mail us at: backchat@cu-amiga.co.uk



Backchat
CU Amiga
37-39 Millharbour
Isle of Dogs
London E14 9TZ

Gloom fixed

I'm a regular reader of your magazine and I've all your CDs except for CUCD1. I've found all of them to be very good value. My problem is on CUCD17; the Gloom demo appears to have a file missing and I'm unable to try the demo from CD as stated.

I've searched the CD for the file but cannot find it anywhere. It's supposed to be in the root directory. Can the necessary file be added to a later CD? Also can I purchase a copy of CUCD1 as this is the only one I haven't got and I'd like my collection to be complete?

P Brown, E. Sussex

There was a problem with the Gloom demo as you say. You should find it on this month's CD in a working form. The first CUCD is no longer available as it has sold out completely.

TFX manual: a fiver

Looking in my local news agent for your great magazine I came across another mag called Focus, December issue. It looked interesting so I bought it. I found a wonderful article by Steve Boxer about the Amiga.

It contained details about the Amiga/Gateway saga and a review about its chequered history with Commodore and Escom. He said "if the company [Gateway 2000] can get a credible product in the shops, I would sink to my knees in admiration". Strong stuff you'll agree.

The article itself didn't tell me anything that your good selves hadn't already informed me about, but what was notable was that this was the first time I had seen something positive about the Amiga outside the dedicated Amiga press. Could this mark a turning point for the Amiga? I for one hope so.

Also, after your incredible TFX giveaway – I thank CU, times 10 to the 45th power – I noticed that Software First was selling the PC-CD ROM version of TFX for only a fiver. I bought this because it comes with the full manual. I've checked the controls between your hints guides and the manual and they appear to be the same and you get a nice TFX box to put your CU cover disk into.

So I would urge folk out there to buy this as it would at least show your appreciation to Ocean/DID for doing a very decent thing and allowing us Amiga folk to enjoy their wonderful flight sim.

And finally, does anyone out there in Amiga Land know how to get the "secret Targoid ship" in Frontier-Elite II? I bought Tony Dillon's Secrets of Frontier Elite which was very helpful for a great many things, but has left me more confused than ever about this Targoid ship. Please help, it's driving me mad!

Finally, if David Braben is out there reading this then where the heck is the Amiga version of First Encounters Elite III? Come on Mr Braben, us Amiga folk deserve it!

G Houton, Renfrewshire

Where indeed? Tony Dillon proved to be a bit hard to track down this month so we couldn't ask him about the Targoid ship. If you get off on people outside the Amiga press talking about our favourite machine, point a web browser at www.rust.net/~mignash/hm97.html or change the 'hm97' part to 'hm98'.

Fall of the PC empire

For some years now I've owned an Amiga 1200, and in the last three years I've been on two computer courses where PCs and Macs have been used, and in all honesty I have to say that my upgraded A1200 is a better machine.

On my courses while talking to the tutors I mentioned what machine I used and they both replied the same "Oh the Amiga, that's a 16-bit kids games machine", so I brought my "kids games machine" in to show what it could do. Well it must be doing something right as they are both now proud A1200 owners. What was that old addage; "Seeing is believing". Previous to the A1200 I had an MSX computer, which was to be the new direction in home computing, till it bit the dust. Why? Simple, no software etc, so I have had past experience of failed computers. I am now writing to warn others who want the Amiga to survive to support the machine we all have come to know and love.

Could you imagine a PC owner having the same loyalty as the Amiga has? This is the great strength of the Amiga. Its users know how good it is, otherwise it would be dead and buried by now. So with that said could I put forward three suggestions to those who like me want the Amiga to rise again:

1. Gateway; Try pulling your finger out and put your money where your mouth is.
2. CU Amiga; Keep publishing the mag. We need a focal point of contact and you're IT – as far as most Amigans are concerned.
3. Amigans; Stop harping about old 500s and 600s, UPGRADE! Get a 1200 and stop slagging off about software etc for what are in all honesty Dodos. A second hand 1200 costs about £150, a new one is about £240. Compare that to a PC or Mac for goodness sake. If you can't afford to even buy a second hand machine maybe you should consider taking up another pastime like bungey jumping with an ordinary rope. UPGRADE!!

It's a pity Commodore didn't perform half as well with the Amiga as you have with the magazine. If they had, the Amiga would've been leading the home computing market, and not struggling like at present. We may be down but we're not out.

Eamon MacAnna, Beál Feirste, Eire

"Could you imagine a PC owner having the same loyalty as the Amiga has? This is the great strength of the Amiga. Its users know how good it is, otherwise it would be dead and buried by now."

Where are the games?

In the Nov 97 CU Amiga there was an excellent article in the Points of View section. It was Andrew Korn's piece about the Amiga being alive and kicking but nothing being available in the shops. I quote, "products are coming, games like Myst, OnEscapee and Gloom 3 have the potential to get people excited again.

The question is will they be widely available?". Well the first time I read this I thought to myself, "of course they will be available, I've been assured by Epic Marketing that the two games I want (Gloom 3 and Street Racer) will definitely be in Game and Electronics boutique!

However last weekend I went to these shops in Newcastle (a big well known city not some piddly little village) and Metro Center (the largest Shopping Mall in England!) and was informed by both Game and EB that they had never heard of Street Racer or Gloom 3 and that the only game they had 'pencilled' in for the Amiga in the last two years was Champ Man 2 which they said had already been delayed ten times!

"All that John is saying is make a PC. That isn't an Amiga."

This makes me wonder why companies bother publishing games for the Amiga at all. I'm not saying this because the Amiga is a dead format or because not enough people have high spec Amigas to run good games, I'm saying it because they publish these games and advertise them in their adverts but they NEVER seem to hit the shelves!

I am probably right in saying that most buying is done via shops (hence their existence) and that mail order is not as good a way of selling things as actually having them on a shelf where hundreds of fans will visit every single day! So why don't the distributors get off their butts and get the games in the shops?

This way more will be sold, distributors will get more money, demand for Amiga programmers will rise, and in the long run more games will get into the shops and we may even see the Amiga section growing bigger than the Atari 2600 section!

Gareth Murfin, gazy@globalnet.co.uk

Kennedy fan club no.1

Its just obvious that some of us 'Amigans' are not as close to the Amiga as we think we are.

▲ OnEscapee, in a shop near you soon... hopefully .

Take John Kennedy as an example. With his warm comments about what he thinks of the Amiga's future and what should be done.

He says that the 'New Amiga' should be a black box, that plugs into a T.V / monitor and gives you access to the Internet and a whole lot of other things. I actually thought this was a good idea. It has to be done because we need Internet Explorer or Netscape (OK get them ported), and in his own words "forget AmigaDOS and the Workbench".

Now hang on a minute. WindowsCE, isnt that used on them Psion things or something similar? Why would we want Windows? One of the main reasons we stick with the Amiga is because of the easy use of Workbench, and how it interacts with the user.

All that John is saying is make a PC. That isn't an Amiga. The Amiga is one of a kind with its own operating system and own technology. So what the hell is he on about? We dont want to fall to Windows – if we did we would have changed over to a PC already.

Also the games scene for the Amiga is looking great. I today downloaded a demo of Foundation, and I am definitely going to buy it. For one person to create a game like that is amazing. Maybe he did have some help, but this guy is extremely talented indeed.

Also there is Myst, Explorer 2260 which I can't wait for, and many more games that require a proper machine to run. Leaving on a good note, I have come across the Nova Design website. They are creating PPC Amigas, in many different ranges and are quite cheap.

They include amazing 3D capabilities and much more. I think this is what the third party Amiga manufacturers need to do. We dont want 030, 040 or even 060 because they are just too slow now.

Now it's down to us people. We need to keep the Amiga alive, otherwise, get used to WinblozeCE or whatever. We can get through this, and we are going to get through it, just stick with it.

Aaron Newitt, Birmingham

Kennedy fan club no.2

What on earth is John Kennedy dribbling on about? Replace the AmigaOS with Windows CE? Is he mad or what?

The entire REASON Amiga users are still using the beast is because of its ease of use and straightforward operating system! We do NOT want something that takes up 8Mb of ROM just to get a bloody operating system (if you can call it that!) up and juddering along!

The Amiga's OS is compact and very quick, certainly a lot faster than any version of Windoze I've seen running on any Intel CPU. We'd very much like to keep it that way thanks! Please lock Mr. Kennedy up in a room of PCs and only let him out when he starts to scream. Then we'll have no more of this crazy talk!

Neil Sanderson

That's opinions for you! We believe the way forward is for everyone to have their say, and that includes you of course.

By the same token, we don't vet the Points of View section to make

Controversy of the month

Brink of insanity

I think that the loyalty of Amiga users has reached the brink of insanity. For the price of an accelerator one could purchase a top of the link Pentium 200 if not a 300MHz Pentium II, complete with 32Mb of RAM, 4Mb graphics, 16-bit sound, network card, high speed serial ports and SCSI.

This will run virtually all software. If that isn't enough incentive for anyone to drop their Amiga-nautic upgrade ambitions, one can draw the conclusion that insanity abounds in this community.

I think that Amiga Inc should take an invite to make 040 boards and 4Mb graphics cards, as well as OS 3.1 available, new or used at low cost, to inject a little bit of adrenaline in the vast communities of 020 and 030 machines which are at best meek marvels of yesterday.

If all Amigas were equipped with at least a 25MHz 040, OS 3.1 and 4Mb Cybergraphx, there would be much more consumer confidence and I think that new innovations like the ones from phase 5 would be more likely to succeed.

It is moronic to release machines with anything less than an 060. The A1200 should be banned!

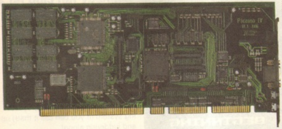
Bold steps are needed. Check out the Mac. The 604e is all but obsolete already, just as it has become available on the Amiga platform. When Apple jumped off the 680x0 line development all but stopped. I think that this will be true of the 604e line. Don't expect to see them get any faster. After all, who is going to sell them?

Patronising the 020 and 030 crowds, deeming them acceptable machines is doing more harm than good. If people have such low expectations from their machines, Amiga will only cater to low expectations and thus be an inferior machine in the computer world.

Shane, via email

The voice of reason or just another new PC convert snubbing his smug nose at the Amiga scene? Are we really all doomed? Is the PowerPC route a deadend? And just where does belly button fluff come from? Let us know what you think of it all.

Continued overleaf ▶▶▶



▲Picasso IV, not so affordable to all and sundry.

sure everyone always sings the praises of the Amiga. Blind faith is dangerous – we prefer a good healthy debate.

Wrong end of stick

So, now I read in the web directory that what our dear ole Petro Tyschtschenko (god what a difficult name to spell, I guess he hasn't experienced much cheque fraud) wants to see in the future is an Amiga with a 68080 processor...

How the dingel-o-dongs name does he think that he will manage that? How will one single company manage to revive a CPU that is thought of as obsolete by most of the computing society and the manufacturer? Dear CU, as one of the major entities in the Amiga community I firmly believe that it is your obligation to sway Petro boy away from this foolish notion.

Another very concerning statement that I read there was that Petro didn't want to rewrite the OS for a new processor! My god, what is it with this man? A new processor is critical for new and improved speed, then a dual-CPU period is inevitable (we have this transit period now with phase 5 boards).

But please, Amiga International must push the Amiga community forward into the next stage: the RISC era with a RISC optimised OS. We can all check out the efforts Apple made with their first PowerMACs where there was an OS running 68k emulation.

It is high time that Amiga Int get their finger out of their you-know-what and show the Amiga community how we will enter the year 2000, and most importantly it should be a bold move that shows the Amiga community that we are really back for the future, and that's not a last wimp attempt to squeeze some cash out of the game entertainment market.

As a little example of bold innovators in the Amiga market I present to you ClickBOOM. With their latest game COSMIC they truly set a standard for the Amiga scene by recommending these hardware specs for the game: PPC, graphics card, sound card, 12x CD-ROM and a whopping total of 32Mb RAM. I sincerely hope that they will have success with this game so that it can show the rest of the Amiga manufacturers of hardware and software that it's sink or swim (did you read that Petro? That's aimed at you). Thank you for listening to a mad Norwegians ravings.

PS: How is it going with those 680x0 inside/Powered by Amiga stickers?

df397aa@itstud.hifm.no

You've managed to get the wrong end of two sticks in one letter. Well done!

"Another very concerning statement that I read there was that Petro didn't want to rewrite the OS for a new processor!"

First let's tackle the 68080 issue. What Petro meant was "wouldn't it be a whole lot easier for us all if there was a 68080 chip that was comparable to a PowerPC. That way it could just be dropped in place without the need for all this re-writing of software and the operating system. This wasn't a serious suggestion that the Amiga continues with a progression of the 680x0 series.

Next, this game called COSMIC doesn't exist and it never will do. ClickBOOM are merely stating the kind of system requirements that would be required for various types of games, should they be written in the near future.

They are saying that the game that requires a system such as you mention would be "cosmic".... as in "extremely good".

Mega bucks

I always look forward to seeing the magazine in the store again, especially with the CD attached.

But I also dread to read it.You ask yourself why? (at least I think you would) Well ,I shall explain. Every month you review something great, and that is the problem.

Again I have to look at something great that I can't buy... like:

squirrelzip gold pack	£179.95
squirrel cdr GT	£ 399.95
scanquix 3	£ 59.95
HP scanjet 5P scsi	£175.00
Fusion	£49.95
603e powerboard 060/50	£599.00
infinitiv towerkit	£159.95
zorro III slots	£319.95
pcmcia adaptor	£29.95
keyboard case	£39.95
printer epson	£359.00
picasso IV	£249.95
prelude soundcard	£169.95
digipens	£109.95
ariadne	£129.95
17" multisync monitor 1701	£399.99
Total =	£3432.39

That's a lot of money, so count yourselves lucky at the magazine that manufacturers mail this stuff to you for evaluation and that you can go to the boss and ask for funds.

I'd need about 3 to 4 years to save this kind of money. And when I have to think what it would cost me if I had this set up. I could emulate a PC with Windows95 and a full Mac, I would need to buy Mac and PC magazines and games too.

The delay in development of the Amiga may have been bad ,but for me it gave the machine extra value, unlike my brother who bought a top range PC a year ago that is now an entry machine, my miggy was useable longer.

Don't think I didn't upgrade, I bought an accelerator card (030/25/882) I bought a squirrel (and after a year a surfsquirrel with a 33.6 modem) and a scsi 1 gigabyte harddisk) actually I bought an A2000 first and wanted to upgrade that but decided an A1200 would be a better deal, I upgraded it to the setup given above and last summer bought a second Amiga for 600 guilders cheaply (as a replacement if the old one should croak).

But I now see that I cannot keep up in the race, so I have to fold and stick with the set up I have now.

Dennis Eijs, Netherlands

To the Point...

OK online

I'm just writing to thank you for the excellant Net trial with UKOnline. With your help from the Wired World and Surfs Up! columns the Internet really is fun to use on the Amiga. Many thanks, and keep up the good work on the magazine

David Steele, via email

Can't get off

Thanks for the free Internet trial with UK Online. Slight problem. Three days now, I have tried to disconnect, but my willpower is gone. My brain is overheating, information overload.

Who haste casted upon me this spirius cookie. Now if I could only reach that off button. Nah, I'll just have another hour...

Lazy Bone, via email

TFX dodgy disks

What can I say about TFX... absolutely 22 carat brilliant. A little request though. Please, have a word with your disk copiers as most of my TFX disks had errors and I eventually got them replaced.

I've got this month's CU Amiga and went to install PC Task and guess what... more errors on the disks. I know I could get them replaced but I just wish they'd use some decent disks. Anyway keep up the fine work

Graeme Wakerley

We're not sure what happened with those TFX floppies. The disks were certainly from a bad bunch and we've since had stern words with the duplicators. It seems you just got unlucky with PC Task though, as new, higher quality disks were drafted in by that stage. Any faulty cover disks you might come across will always be replaced.

CU Amiga reserves the right to amend or edit readers' letters submitted for publication.

3 ISSUES FREE!

SUBSCRIBE TO CU AMIGA THIS MONTH AND GET 12 ISSUES FOR THE PRICE OF 9*

Complete the form below and send payment to: CU Amiga Subscriptions, Lathkill Street, Market Harborough, Leicester LE87 4PA or if you wish to pay by credit card call our subscriptions hotline on 01858 435350 quoting source and offer codes. Lines are open from 8.30am to 9pm Monday to Friday and 10am to 4pm Saturday and Sunday.

5 GREAT REASONS TO SUBSCRIBE:

- **Save £18.00 on the CD issue, £14.00 on the disk issue**
- **No risk that the newsagent will be sold out of the CD or disk edition you want**
- **All issues delivered to your door so you'll never miss an issue**
- **No charge for postage and packing in the UK**
- **A money back guarantee on un-mailed issues if you are not satisfied**

SUBSCRIPTION HOTLINE 01858 435 350

SUBSCRIPTION ORDER FORM:

Name: ....

Address: ....

.... **Postcode:** ....

Date of Birth: .... **Telephone:** ....

Source codes: CD Edition 001B Disk Edition IA2T Offer codes: CD Edition CD 001D Disk Edition DD IA2T

Annual Subscription Rates:	Disk version	CD version
United Kingdom + NI	☐ £40	☐ £54
Air Europe + Eire	☐ £55	☐ £69
Rest of world /air	☐ £75	☐ £89

METHOD OF PAYMENT (A receipt will not be issued unless requested)

Direct Debit Instruction to Your Bank/Building Society

Account in the name of ....

Payments will be deducted quarterly.

Account No ☐☐☐☐☐☐☐☐

Sort Code ☐☐ ☐☐ ☐☐

DIRECT Debit
ID No 724096

Name and Address of Bank/Building Society ....

....

....

Signature ....

Date ....

Please pay Emap Consumer Magazines Ltd. Direct Debits from the account detailed in this instruction suject to the safeguards assured by the Direct Debit Guarantee Banks/Building Societies may not accept direct debit instructions for certain kinds of accounts.

Payment by Credit Cards

Please debit my credit card for the amount shown overleaf.

☐ Mastercard ☐ Visa ☐ American Express ☐ Diners Club

Access/Visa/American Express/Diners Club Account No

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Expiry Date ☐☐☐☐ Date ....

Signature ....

All other payments

I enclose a ☐ Cheque ☐ Postal Order

☐ International Money Order ☐ Sterling Draft (Please tick)

MADE PAYABLE TO EMAP IMAGES LIMITED

On occasion EMAP Images Limited and associated companies within the EMAP Plc group may permit other reputable companies to make offers of products or services which we believe may be of interest to our customers. If you DO NOT wish to have the details given here passed on, please tick the box ☐ or mention when calling. Telephone calls may be monitored for staff training purposes.

Points of View

CU
The Monthly Expert

Time again for a few more opinions... Please note that the views expressed are not necessarily those of CU Amiga Magazine.

The best advertising money can't buy

For what amounts to a pretty minor dent in their bank balance, Gateway bought up the rights to the Amiga from Escoms liquidators. From this they have the potential to open a significant new marketplace, the low to mid range home computer market. These days everyone wants access to multimedia, to the internet, to top games. Right now the only real choice is to spend £1000 plus on a PC, and for that you hardly get the most user friendly of machines.

"Right now the only real choice is to spend £1000 plus on a PC, and for that you hardly get the most user friendly of machines."

Gateway undoubtedly bought the Amiga well aware of the potential the platform has for graphics, multimedia and embedded system applications, but to their own long term plans, it is the home computer aspect which will be most interesting. In common with most large PC manufacturers, the last year or so has shown them that diversification is the key to success in the computer market, hence their moves into server systems, laptops, and products like the Destination TV/PC.

Getting an A500 for the 90's into the mass market will take a lot more money than the property cost in the first place. It would be easy for AI at this point to let the market tumble along at its own pace for a little while. After all if they want to make the Amiga a mass market product they are going to have to address the concerns of a far larger constituency than the current Amiga crowd, so it may seem to them that supporting the current community isn't as high priority as preparing for the next.

They are well aware of the value of the expertise there is in the market, companies like Phase 5, Index information and HiQ, who have produced revolutionary hardware designs. They recognise the importance of software houses like Newtek, Cloanto or Haage & Partner who have produced some of the Amiga's defining software.

They also appreciate the importance of companies like Vulcan and ClickBOOM who do so much to keep the games market alive, and the importance of those hundreds of developers who distribute via the Aminet and have made it the ultimate software resource. The question is whether or not they truly understand the value of you.

There isn't another market like this one. People think Apple users are loyal, but they are grandmother sellers to a man compared to the Amiga community. By buying into Amiga, Gateway bought AI literally tens of thousands of evangelical salesman and PR people who will happily spread the word for free.

"AI have a vast worldwide advertising campaign just waiting for the word. To buy advertising like that would cost far, far more than buying the company."

If the guys at AI were to read the post we get they would see letters from the readers who went into their local Escom shops and installed demos on the Amigas there so people could see something more interesting on display than a 4 colour Workbench, they would hear about the people who go to an evening course on computing and bring in their Amiga to convert the teachers, the people who supply technical help to local Amiga users free of charge, the people who advise friends and family on their computer purchases and would have them buying Amigas like a shot if there were any in the shops.

Quite simply, AI have a vast worldwide advertising campaign just waiting for the word. To buy advertising like that would cost far, far more than buying the company. If AI know what's good for them, they aren't going to let that free advertising walk away.

It's time that AI really did something to tell all those people out there that what they have done is appreciated and will be repayed. No-one has infinite patience, and the re-appearance of an owner isn't enough to stop the market haemorrhaging users. So AI, get your finger out and say "thanks, and stay with us". You have been quiet too long and in the final analysis it's yourselves you are hurting.

Invest a little now – how much would it cost to prove to the market your seriousness, your willingness? To buy the current user base a small present or two? Compared to what AI have to spend on marketing as a whole, spare change. Spare change spent like that is an investment the likes of which give advertising and marketing people wet dreams.

Andrew Korn, Staff Writer.

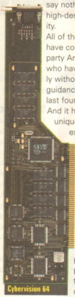
The dangerous games

There's a dangerous game being played out there in the world of Amiga development, both for existing machines and for the "Amiga Of The Future", whatever our new friends in South Dakota determine that to be.

Yes, this is about custom versus standard chips, but trust me, it's not the same old argument of purity versus "cloneism" – the argument that says that if Jay Miner intended for the Amiga to use industry standard parts he wouldn't have stayed up late drawing out the original chipset with pencil and paper and revolutionizing the world of computing, he would have bought some cheap chips from Yamaha and been done with it.

It's clear in this day and age that the development of components from outside strictly Amiga camps has been an unambiguously good thing for users.

Without them, we would have no true 24-bit video, no 16-bit audio, no ultra-fast serial ports sitting on clock headers and no cheap PCMCIA ethernet cards, to say nothing of a supply of high-density floppy capability.


Cybervision 64

All of these developments have come from the third-party Amiga developers, who have had to act largely without supervision or guidance for most of the last four years.

And it has been the unique blend of their expertise and knowledge of the Amiga and the commodity component markets that have brought these wonderful products. Of course, it has not always been easy.

To cite one example, Phase5 at one point faced lead times of four months on the S3 SVGA chips that drove the original CyberVision 64.

"... when you're not tied to a particular supplier by being owned by the same company, you can play the market for better services at better prices..."

When the ultimate control of componentry lies in someone else's hands, you suddenly become just another bidder for their services – a bit different from the days of Commodore and their wholly-owned chip fabricating subsidiary. Sure, they had schedules too, but it was a little easier to pick up the phone and get priority when you were part of the same company.

Nobody at Amiga, Inc. is likely to tour for-sale chip fabrication plants to ensure that future Amigas get the components they deserve. In fact, Amiga, Inc. is divorcing itself as much as possible from the actual hardware manufacturing possibilities of the Amiga, preferring to license out, which they have started in earnest.

Their licensees to date have been relatively small firms who don't own fabrication plants, either. They work on contracted demand – demand from Amiga, Inc. for the OS and chipsets, demand from various other outsourced suppliers for CPUs, other chips, motherboards, casework, etc. All that this means is that the production of Amigas has a few new variables thrown in.

There's a lot of potential for this to work well: when you're not tied to a particular supplier by being owned by the same company, you can play the market for better services at better prices (Commodore's chip fab proved incapable of manufacturing AGA Lisa, so HP had to be contracted!).

Don't feel too bad for the industry – this is how the PC clone market works, and it does seem to be working for Gateway, doesn't it?

■ **Jason Compton, US Correspondent**

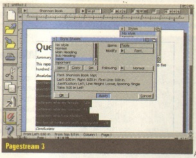
Where now for Amiga software?

There are two key areas to a successful computer, one is great hardware and the other is powerful and affordable application software. Over the last twelve months, we have certainly seen some really excellent pieces of hardware.

Reasons to be cheerful for sure but what about Amiga software? Look at the amount of software coming in for review and you'll see hardly any.

Worried? You should be. The majority of Amiga owners have never whole heartedly supported software. Honestly, they haven't. There will be those of you shaking your heads and saying "I do" but you my friend, are in a minority. Appreciated, but still in a minority.

Having been in the industry for many years now, I know the important numbers for many software packages and it isn't pleasant reading. In one case I know of, the uptake of one package is less than half a percent of the total CU Amiga readership.



Font: Shannon Book 14pt.
Left 0.00 in Right 0.00 in First Line 0.00 in.
Justification Left, Line Height Loose, Spacing Single
Tabs 5.00 in Left

Pagestream 3

Add the other Amiga magazine readership to this and those that don't buy Amiga magazines and that percentage drops to even lower levels. So what is the future for Amiga software if this is the level of support we can expect?

There are two possibilities. One is that within two years there will be no or very little up to date commercial Amiga software available and do we really want to see that happen?

Of course not. The second option is for those that have so far failed to support the Amiga, to get out there and buy at least one piece of Amiga software and show authors that their work is valued by the Amiga community.

All it takes is five percent of the current estimated Amiga ownership to make a product pay for its development (a year, perhaps two) and encourage the author to stick with it. Five percent! Is that asking to much?

I agree that the Amiga software market is perhaps no worse than the PC one in terms of percentages of units sold and sure, there are arguments for and against coverdisk mounted software but folks, many software publishers are really hurting. If they don't get your support, who loses out? You do. We are not talking charity here.

"... many software publishers are really hurting. If they don't get your support, who loses out? You do. We are not talking charity here."

The prices of many software packages are very cheap indeed and for the money, you get good value. Packages like Wordworth and Final Writer stand up very well when it comes to ease of use and the features you get.

PageStream 3 is perhaps one of the all time best desktop publishing packages I've used and when it comes to simplicity, DrawStudio is so much easier to use than the PC equivalent. I certainly know that when it comes to pixel pushing, I would rather edit an image on the Amiga than try doing the same on my PC.

The future of Amiga software is in your hands. Don't let it slip. Okay guys, you can have your soap box back now.

■ **Larry Hickmott, Contributor.**

TECHNO TRAGEDIES The Jupiter Ace

Techno Tragedies is dedicated to the memory of those technological innovations which somehow never quite caught on. This month we pay our respects to the Jupiter Ace.

Born 1982

Died 1985

What was it?

Back in 1992 when my friends had sold their ZX81s to help pay for the ZX Spectrum, and the Amiga was still a glint in the eyes of some American dentists, I did something odd. While everyone in my school was waiting for their Spectrum order to get to the top of the heap, I decided to buy a Jupiter Ace instead.

Designed by ex-Sinclair Research staff Richard Altwasser and Steven Vickers, the Ace was a Zilog Z80 based computer. At the time, the guys at Jupiter Cantab were quoted as saying "We saw how Clive got rich making computers, so we decided to have a go ourselves". This wasn't to be: at least with the Jupiter Ace.

Standard specifications included 3K of RAM and 8K of ROM, but there was one major difference which set it apart from every home computer before or since. Whereas all the other computers came with the programming language BASIC built into the computer's COM, the Jupiter Ace used FORTH .

Why should it have made it?

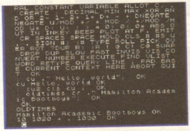
The Ace was fast. BASIC programs on other computers of the day were incredibly slow, but the alternative – machine code – was a black art in many respects.

FORTH on the other hand was very fast, and much more memory efficient. FORTH combined the low-level aspects of C with simple structured programming techniques and did it all in a tiny amount of memory. Numbers were passed to functions using a Reverse Polish Notation stack, in itself a remarkable concept for any programmer reared on REM statements and GOTOs.

The implementation of FORTH was exceptional too. Originally a language designed for controlling radio telescopes, no one had imagined it was an interactive system until Jupiter Cantab came out with the Ace. The little "OK" message at the bottom of the black screen always makes me nostalgic for the many hours I spent defining new words and building up programs block by block, before trusting them to a cassette tape.

▲ Inspired by Sir Clive's ZX81 success, Altwasser and Vickers had a crack at going it alone with the familiar looking Ace.

▲ Like a ZX81 in negative form, the Jupiter Ace found itself caught between the two stools of Sinclair's popular machines.



```
RAL CONSTANT VARIABLE ALLOT C, ,
 CREATE : DECIMAL MIN MAX XOR AN
D OR 2- 1- 2+ 1+ D+ - + DNEGATE
NEGATE U/MOD */ * MOD / */MOD /M
OD U* D< U< < > = 0> 0< 0= ABS O
UT IN INKEY BEEP PLOT AT F. EMIT
 CR SPACES SPACE HOLD CLS # #S U
. . SIGN #> <# TYPE ROLL PICK OV
ER ROT ?DUP R> >R ! @ C! C@ SWAP
 DROP DUP SLOW FAST INVIS VIS CO
NVERT NUMBER EXECUTE FIND VLIST
WORD RETYPE QUERY LINE ; PAD BAS
E CURRENT CONTEXT HERE ABORT QUI
T  OK
: cu ." Hello, world";  OK
cu Hello, world OK
: cu2 cls cu ;  OK
: oldtimes cr ." Hamilton Academ
ic Bootboys";  OK
 OK
OLDTIMES
Hamilton Academic Bootboys OK
10 1020 + . 1030  OK
 C
```

▲ Go FORTH and program above and beyond the power of BASIC. Alas the Ace's monochrome graphics couldn't hold their own in the face of colour competition from the ZX Spectrum.

Although the Ace had black and white graphics only, the screen was character mapped: each 8 by 8 pixel block on the screen could be written in one operation. It also had user-programmable characters, and the end result was an often misquoted 256 by 192 display that was perfect for writing games. I wrote dozens of games using a combination of FORTH and machine code, and they ran faster and more smoothly than anything seen on the Spectrum.

Why didn't it make it?

The Spectrum eventually appeared in big numbers, and blew the Jupiter Ace away. Rich kids had their mummies buy them BBC computers which were even better. The Ace was built incredibly cheaply, and it showed. The case was thin white plastic held close with plastic rivets.

The keyboard was an extension of the main computer PCB, with tracks being shorted by conductive pads on the rubber keyboard. Each key worked for about three months, and then a new keyboard had to be bought (or even made, by gluing conductive foil under the keys).

Even the hardware design itself was flaky, with multiple addresses accessing the same memory locations with differing results, and the madness of reorganising the expansion port at the rear. By altering the port slightly, a generation of cast-off ZX81 peripherals could have been plugged straight in: instead Ace owners had to buy special 16K RAM packs.

In the end, the cheapness of design, the use of FORTH, the lack of colour and any possibility of games software spelled the end for the Ace. The market was becoming flooded with cheap, colour home computers, and a 3K black and white, alien device didn't stand a chance. The Spectrum frenzy took hold, and the rest is history.

Where is it now?

In 1994, Jupiter Cantab went bust and the Jupiter Ace was bought by Boldfield Computing, who continued to try and sell it for a year or so. After that it just vanished: the last I heard from Boldfield was a mailshot offering to auction off the original Jupiter Ace ROM Source code for several thousand pounds.

I don't regret buying the Ace. Learning FORTH made me a better computer programmer. I certainly picked up languages such as C a lot faster than those versed in the linear and non-structured BASICs of the day. I also learnt how business ventures can let you down, when a company which had promised to sell my Ace games went bankrupt.

By the time the Ace was dead and buried, I had moved onto the Amstrad CPC with a working knowledge of Z80 Assembler and a sense of disbelief that a keyboard could really work with keys which weren't made of rubber. There is a FAQ on the Ace at **http://users.aol.com/autism uk/ace/faq.htm**, with links to an Emulator running under MSDOS. I hope very much to find some old tapes in my roof space and get my old games running again! ■

John Kennedy

The New A1200 Power Tower

A1200 POWER TOWER

- Includes 200 watt PSU
- PC Keyboard
- PC Keyboard Interface
- Floppy drive facia - floppy cable
- All screws, port labels and mains lead

A1200 POWER TOWER 1

- Power Tower and Keyboard
- A1200 Main board
- Floppy disk drive
- 3.1 Workbench
- 3.1 Manuals
- Wordworth 4.5SE
- Turbocalc 3.5 Spreadsheet
- Datastore 1.1 Database
- Photogenic 1.2se
- Personal Paint 6.4 & Organiser 1.1
- Pinball Mainia game & Wizz game

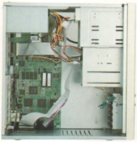
A1200 POWER TOWER 2

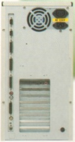
- Power Tower
- Keyboard
- A1200 Main board
- 24x Speed IDE CD-ROM
- 1.7GB Hard drive
- 1230 Blizzard card inc. 16MB
- 4 way IDE interface/IDEFix97 software
- Floppy disk drive
- 3.1 Workbench
- 3.1 Manuals
- Wordworth 4.5SE
- Turbocalc 3.5 Spreadsheet
- Datastore 1.1 Database
- Photogenic 1.2se
- Personal Paint 6.4 & Organiser 1.1
- Pinball Mainia game & Wizz game

A1200 POWER TOWER
£149.95

A1200 POWER TOWER 1
£359.95

A1200 POWER TOWER 2
£729.95





The Power Tower
GOLD
From £149.95

All Power Towers are assembled by Power Computing

All prices include VAT. See DPS ad for terms and conditions

A1200 POWER TOWER ACCESSORIES

Zorro (5PCI, 2 ISA, 2 Video Slots option)	£149.95
Zorro III (5 PCI, 2 ISA, Video (option), A4000 CPU Slot	£319.95
PCMCIA V Adaptor - allows squirrel to be fitted internally	£29.95
External Audio Port for internal CD-ROM (needed for listening to Music CD's and games that use CD audio)	£15.95
SCSI-I Adaptor - Internal 50 way pin header, external 25 way connector	£19.95
SCSI-II Micro high density connector. Internal 50 way pin header, external micro HD connector	£25.95
SCSI-III Ultra Wide internal connector, external micro HD connector	£29.95
4 Way IDE Interface (buffered) & IDEFix software	£30.95
3 Way IDE ribbon cable (suitable for HD's, CD-ROM)	£9.95
3 Way SCSI 50 pin header (suitable for HD's, SCSI CD-ROM)	£15.95
Iomega ZIP drive - Internal inc. cable IDEFix software, Power Zip Tools, 100MB Cartridge and IDE 4 way buffered interface	£149.95
Panasonic LS120 - 120MB floppy drive. Also recognises 1.44MB discs. Inc. cable, IDEFix software, 120MB disc and IDE 4 way buffered interface (AF Gold 92%)	£149.95
25 Watt (PMPO) Typhoon speakers inc. adaptor cable	£19.95
260 Watt (PMPO) Typhoon speakers inc. adaptor cable	£49.95
200 Watt (PMPO) Typhoon subwoofer and control box	£55.95
PC Keyboard Interface	£29.95

AMIGA MAGIC
£209.95

AMIGA 1200 MAGIC PACK

- 2MB RAM 68020 14.3MHZ
- AGA CHIPSET
- WORDWORTH 4.5SE (WORDPROCESSOR)
- TURBOCALC 3.5 (SPREADSHEET)
- DATASTORE 1.1 (DATABASE)
- PHOTOGENIC 1.2SE/PERSONAL PAINT 6.4
- ORGANISER 1.1 (PERSONAL ORGANISER)
- PINBALL MAINIA (GAME)

AMIGA BUNDLE ONE

AMIGA BUNDLE ONE INCLUDES:

- AMIGA 1200 MAGIC PACK
- TURBO 68030 LC ACCELERATOR
- 4MB RAM INCLUDED

AMIGA

POWER ARE OFFICIAL SUPPLIERS OF THE AMIGA 1200

AMIGA 3.1 OPERATING SYSTEM INC.

- ROM CHIP, SOFTWARE AND MANUAL

A1200/3000 3.1 OS	£45.95
A500/600/2000 3.1 OS	£39.95
A4000 3.1 OS	£45.95
A500/600/2000 3.1 CHIP ONLY	£25.95
A1200/4000 3.1 CHIP ONLY	£29.95

MONITOR NOT INCLUDED
£1099

AMIGA A4000 TOWER IDE/SCSI INCLUDES

- 32MB RAM ON-BOARD
- 1.7GB HARD DRIVE, 3.01 OS
- 68040 25MHZ PROCESSOR

A4000 TOWER	£1099

VISA

01234 851500

FAX 01234 855400

UNIT 82A SINGER WAY
KEMPSTON MK42 7PU

Visit our web site www.powerc.com

POWER
COMPUTING LTD

ISLONA

WORK, REST AND PLAY, PLAY, PLAY

NEW
BLOCKHEAD

DISK - £7.99

Block Head

Fast thinking puzzle game comprising: Intuitive Controls, Challenging difficulty curve. Random Level mode, dozens of power-ups, Great music.

NEW
Marblelous

DISK - Now £4.99

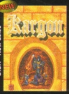
Marblelous

100 brain teasing levels each more difficult - you control a metalic ball using your mouse and have to find your way to the exit.

DISK - £9.99

XP-8

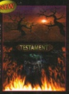
XP-8 is a vertical scrolling shoot'em up, featuring 4 way - 50fps scrolling, wicked music, sound effects and amazing animated alien space-craft.



DISK - Now £9.99

Kargon

Kargon is a completely new challenge! Up to 4 players can compete in order to find one thing out: Who the greatest magician among them is.


NEW
TESTAMENT

DISK - Now £14.99

Testament

When it gets dark, the living dead begin their celebration on the graveyard. Make your way through swampy tracks and dark tomb monuments.

NEW
CYGNUS 8

DISK - £14.99

Cygnus-8

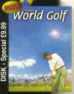
Construct a large scale trading empire in a rich galaxy of planets, or turn criminal and raid space pirate fleets? It's your choice in this sci-fi simulation.

NEW
MASTER AXE

DISK - £14.99

Master AXE

From living legend Master Neil Axe, 3rd Degree Freestyle Kung Fu Black Sash, comes one of the most innovative martial arts simulations ever.


NEW
World Golf

DISK - Special £9.99

World Golf

1-4 players in practice and tournament modes. Five authentic courses from around the World. Five skill levels. Select 1, 2 or 4 full 18 hole rounds.

SIXTH SENSE
INVESTIGATIONS
NEW

"Sixth sense investigations" is a new graphics adventure for the Amiga, based on the classic LucasArts style games. The base storyboard tells of a crazy young guy who has the ability to communicate with the spirit of a sarcastic man. A friend, who thinks of himself as a detective, profits from the psychic abilities of his friend (the crazy psychic guy), by using his skills to solve the most bizarre problems of the rich.

Req: AGA 2MB ram. Available on Amiga CD and Disk. £29.99

Fasten your seat belts and be prepared for an experience like you've never seen before on your Amiga. Flyin' High is here and it takes you to a new dimension of 3D-Racing Games. Step on the gas and race over fully textured and absolutely crazy tracks, on asphalt, mud, field paths and slippery ice. On a 68030 Amiga the game is great fun. Playing with 4 players on a 68060 is really impressive.

Req: AGA 6MB ram, Harddisk.
Available on Amiga CD and Disk. Only £19.99

If you see it cheaper, and they have it in stock, we'll match the price!

SLAM TILT
pinball illusions
AMIGA PINBALL MANIA
THOMAS THE TANK ENGINE & FRIENDS PINBALL
pinball Brain Damage
SENSIBLE GOLF
Championship MANAGER 2
CANNON FODDER
CANNON FODDER 2
DUNE II

DISK - £6.99
DISK - £17.99
CD or DISK - £6.99
DISK - £6.99
CD - £2.99 : DISK - £15
CD-ROM - £19.99
DISK - £9.99
DISK - £24.99
CD or DISK - £9.99
DISK - £9.99
DISK - £14.99

DESERT STRIKE
Flying Fortress
theme PARK
UFO ENEMY UNKNOWN
WING COMMANDER
SILENT SERVICE II
Approach Trainer
GRAND PRIX
RAILROAD TYCOON

DISK - £9.99
DISK - £9.99
DISK - £14.99
DISK - £14.99
DISK - £14.99
DISK - £14.99
DISK - £9.99
DISK - £14.99
DISK - £4.99
DISK - £14.99
DISK - £14.99

Kid's Games!

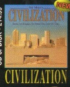
Postman Pat 3
Sooty
Sooty's
THOMAS THE TANK ENGINE & FRIENDS
Sporting Barts
Postman Pat
THOMAS THE TANK ENGINE & FRIENDS
Playdays
THOMAS THE TANK ENGINE & FRIENDS
Playdays

DISK - £3.75 (QS-12)
DISK - £10 (QS-19)
DISK - £3.75 (QS-18)
DISK - £10 (QS-20)
DISK - £3.75 (QS-05)
DISK - £4.50 (QS-13)
DISK - £3.75 (QS-06)
DISK - £3.75 (QS-02)
DISK - £3.75 (QS-17)
DISK - £9 (QS-15)
DISK - £10 (QS-10)
DISK - £10 (QS-01)

Super SKIDMARKS+ CD

SUPER SKIDMARKS+
CD

Super Skidmarks *was* possibly the most addictive and fun game ever. *WAS*, because now there's Super Skidmarks Plus, featuring around 50 vehicles, dozens of tracks, new music and sound effects. The fastest most playable 4 player racer ever! £14.99. *(Amiga CD)*


NEW
CIVILIZATION

CD or DISK - £14.99

CIVILIZATION

Available on CD-ROM or Floppy

Build An Empire To Stand The Test Of Time.

You could be the one person in history that builds an empire that never falls.

- Discover New Technologies -
- Build Wonders Of The World -
CD Version includes AGA & ECS

Gloom 3 Ultimate Gloom

GLOOM 3
ULTIMATE GLOOM

Gloom3 "Ultimate Gloom" is the latest in the Gloom series. Featuring even faster 3D grapghics, 50 Huge new levels new sound effects, 21 new combat levels, 10 new Zombie levels, Double the amount of colours that previous Gloom games. More blood than ever before! £14.99. *(Amiga CD)*

STREET RACER

An unrivalled racing and fighting experience! (Its time to make some more friends). Street racer is now available on the Amiga. The CD version includes enhanced music and the "original" PSX intro!. £14.99. *(Amiga CD & Disk)*

CALL: 01793 432176 TO ORDER

CREDIT CARD ORDERS WELCOME

***Islona Entertainment* (Epic) - BSS House, Area50, Cheney Manor, Swindon, UK**

Most items are held in-stock ensuring fast delivery. Please add a total of £1 per title for P&P within the UK and Overseas.
Trade enquiries welcome, All prices listed include VAT. E&OE *Free Games Catalogue Available, Send SAE.*
Please make cheques payable to ISLONA - *Islona* is a part of the Epic Marketing Group of Companies.
We will beat or match any price for any Amiga game, so long as our competitor has stock of that title.